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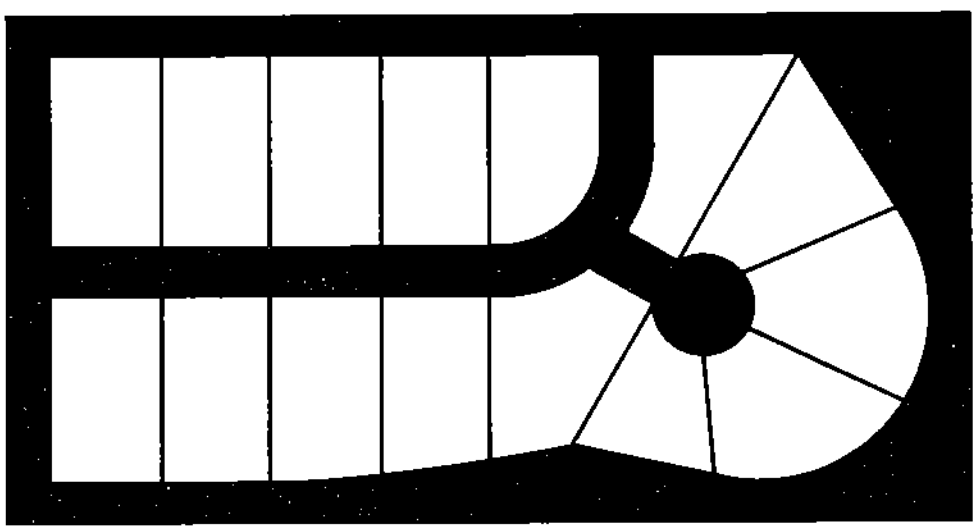
Minnesota State Planning Agency

Subdivision Control



for Minnesota Communities

OFFICE OF LOCAL AND URBAN AFFAIRS • CAPITOL SQUARE BUILDING • ST. PAUL, MINNESOTA 55101

MAY 1975

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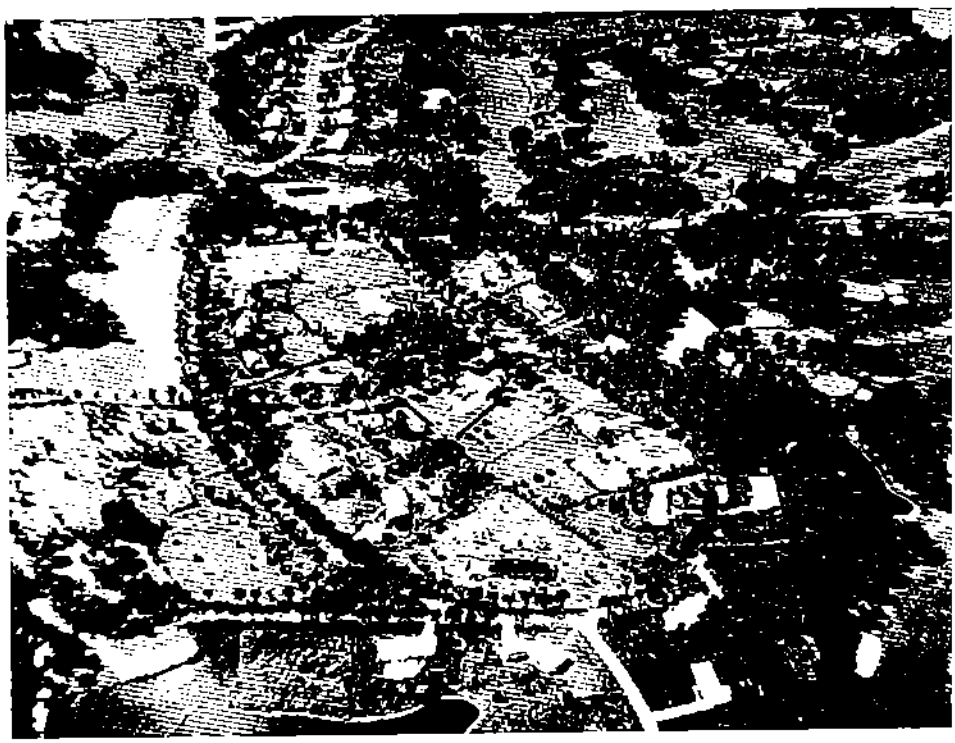
Subdivision Control

FOR MINNESOTA COMMUNITIES



This manual is one in a series of guides being prepared by the Office of Local and Urban Affairs for the purpose of improving the smaller community's ability to cope with the problems of new growth and development. Other manuals completed in this series, or anticipated in the future, include capital improvement programming, zoning administration, official maps, and other techniques or methods of managing growth and new land development.

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Office of Local and Urban Affairs

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Contents

Introduction

Today, more than at any other time, progressive communities are seeking quality alternatives to frequently unattractive, haphazard residential expansion which often results in costly, inefficient service requirements and the destruction of valuable natural resources. For the average family, home buying is the largest investment made in a lifetime, and a well designed and constructed subdivision provides considerable protection for that investment. For the community, an attractive, well designed subdivision will prove to be an enduring, tax producing asset which can be efficiently and economically serviced for many years in the future. Subdivision regulations, used in a systematic manner with other growth management "tools," are probably the most important device for assuring that new residential neighborhoods will fit into a community's existing development patterns as well as its plan for future development.

Expressed simply, land subdivision is the process of dividing a lot, tract or parcel of land into two or more lots, tracts or parcels for the purpose of transferring ownership or building development. Any division of a parcel of land involving a new street is usually considered a subdivision. Subdivision regulations are merely the exercising of a community's authority to adopt standards and procedures for the control of this process, thereby providing for the orderly, economic and safe development of land and services and utilities for that development. These regulations, similar to other property use laws, are the legitimate exercise of "police powers" of governmental units within Minnesota.

The Need for Subdivision Control

One need only visit some of this nation's older urban areas in order to gain an insight into the need for land subdivision control. The industrial "boom towns" of the late nineteenth century were built by land speculators eager to make a quick profit at the expense of arriving workers and their families. Plats were hastily drawn with no thought given to street widths and grades, suitable lot sizes, or how the plat would fit into the community's future development. Block after block of lots as narrow as 15 or 20 feet were offered for sale along narrow, poorly constructed streets with utilities which were inadequate for even these early times. The crowded, poor quality residential blocks thus created were doomed from the beginning to become the blighted or slum areas we see today.

The 1920's also were often characterized by uncontrolled land speculation and the premature subdivision of rural land into many large scale developments. With the widespread use of the automobile and the burgeoning population following World War I, formerly inaccessible rural areas near fringes of cities were platted and promoted by speculators. Miles of streets and thousands of acres of land were platted within the vicinity of many larger urban centers. Improvements were minimal; suitable standards were lacking and these premature

subdivisions normally did not provide for school sites, recreation areas, or adequate traffic circulation.

Such land booms reached their peak in the late 1920's and ended abruptly with the Great Depression. All subdivided parcels were assessed, of course, and placed on the municipal tax roles. Tax delinquencies accumulated, with vacant or unimproved lots representing the major share of delinquent properties. Such conditions meant financial ruin to many municipalities as service costs to these premature developments outstripped the revenues collected. Remnants of these past mistakes can still be seen near some urban areas in the form of weed grown vacant lots--too narrow for today's homes-- and deteriorating streets with crumbling curb and gutter. Clouded titles and the patchwork nature of these obsolete tracts have provided further impetus for latter developments to move well beyond these burdens from the past.

While the scars of these early, premature developments are little in evidence within most urban areas of Minnesota, poor subdivision practices have been allowed in many areas of the state until the present time. Unless a municipality or county adopted subdivision controls, little could be done to prevent over platting, or premature development, poor quality development, and substandard lot sizes. Lakeshore and riverfront property were often platted into many narrow lots without regard to topography, water table, or the suitability of the shoreland for development. Problems of pollution, overuse, and a despoiled natural environment often resulted.

In recent years, more municipalities and counties have been attempting to control land development through the adoption and enforcement of subdivision regulations and other controls. These attempts have met with varying degrees of success, depending upon the quality of the individual regulations and the willingness of the governing body to enforce them.

Impetus also has been added by today's concern for the environment, pollution control requirements, and the provisions of the Flood Plain Management Act (M.S. 104.01) and the Shoreland Management Act (M.S. 105.485) which were passed by the 1969 Legislative Session. While the Flood Plain Act authorizes joint state-local action to promote the wise use and management of flood plain lands, the Shoreland Act prescribed standards for counties to follow in the development of land along streams and lakes. Several of these standards cover requirements normally found in subdivision regulations. Recent legislation has extended this Act to cover municipalities.

Modern subdivision regulations are much broader in concept and application than those developed in response to conditions of the 1920's. The emphasis today is on the quality of improvements and greater control over the location and timing of new subdivision activity. Trends emerging are concerned with how the whole subdivision fits

into the overall pattern of urban growth, planned unit developments, transferring a greater share of the cost of needed improvements from the community to the developer, and strengthening the enforcement measures.

Legal Authority

The authority for municipalities in Minnesota to adopt subdivision regulations is found in the codified planning laws of 1965, under Section 462.358, Subdivision 1, Authority to Regulate. This sudivision reads, in part, as follows:

> *To provide for orderly, economic, and safe development of land and urban services and facilities, and to promote the public health, safety, morals and general welfare a municipality may adopt subdivision regulations which include minimum physical standards and design requirements as to such urban services and facilities, and procedures for plat approval, including a procedure for appeals from actions of the platting authority.*

This Section also allows a municipality to extend its subdivision regulations into the unincorporated areas within two miles of its corporate limits. The purpose of this provision is, of course, to provide the municipality with the opportunity to guide the development of land which it may be required to service some day. Such regulatory extension is prohibited, however, within towns which have adopted subdivision regulations.

Further provisions of this Section authorize municipalities to establish standards or design requirements which may be included in subdivision regulations. Municipalities are also permitted to require land developers to dedicate a portion of the land within a proposed subdivision for such public uses as parks, or contribute an equivalent amount in cash to acquire land for parks or similar public purposes. The city has the option of requiring either land or money in each case, and this requirement also applies to industrial and commercial plats as well as residential subdivisions.

Other provisions deal with necessary legal procedures for plat approval after subdivision regulations are adopted, restrictions on filing and recording conveyances, permits, variances, and the vacation of public easements or reserves. Important points in regard to these provisions prohibit the conveyance of land by reference to an unapproved plat, unapproved registered land survey, or metes and bounds description when subdivision regulations are in force. Also, if an official map has been adopted, the municipality is prohibited from issuing building permits for buildings which do not front on a public street or conform to building set back lines.

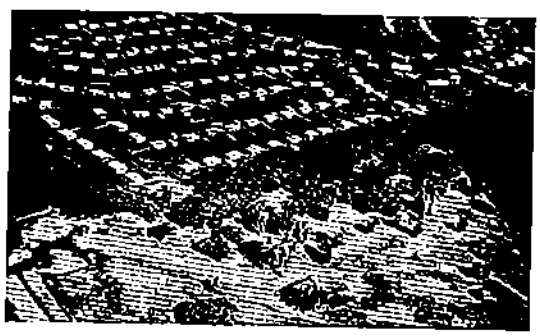
A complete copy of Section 462.358 (Subdivision Regulations) will be found in Appendix A of this report.

Similar enabling legislation exists for counties within Minnesota, although the county legislation is more generally defined.

Permission for counties to adopt subdivision regulations is granted by Section 394.25, "Forms of Control," Subdivision 7. Specific Controls pertaining to other aspects of the comprehensive plan or standards and procedures governing land development (subdividing of land and the approval of plats) may be employed by counties and shall be adopted by ordinance.

The Relationship of Subdivision Regulations to Comprehensive Planning and Other Land Controls

As briefly mentioned earlier, the major purpose of subdivision regulations is to carry out a portion of the comprehensive plan. Subdivision regulations are, perhaps, the best means available for insuring that presently undeveloped areas will conform to the objectives of the comprehensive plan. Development can be controlled and new subdivisions coordinated with one another and the existing community's pattern of streets and utilities. The design standards of the regulations will insure acceptable street widths and grades, and related design considerations, which are in keeping with the spirit of the plan; and, through the plat review process as a part of subdivision regulations, proposed development can be viewed in light of proposals for major public facilities and land needs. In addition, the community will be in a stronger position to determine whether land for a particular public purpose should be dedicated by the developer, or if an equivalent amount of cash would better accomplish comprehensive planning objectives.



1. A typical subdivision at the urban fringe.

From a legal standpoint the comprehensive plan is evidence that the community's particular subdivision requirements are not arbitrary or discriminatory. Although Minnesota municipal planning legislation does not require plan preparation and adoption before a community can adopt subdivision regulations, the intent of the law is quite clear. The placement of Subdivision Regulations under 462.358, Procedure For Plan Effectuation, recognizes that subdivision regulations are one of the major "tools" available for carrying out a comprehensive plan. The county legislation, on the other hand, makes the following direct reference: "A comprehensive plan or plans when adopted by ordinance shall be the basis for official controls (which include subdivision regulation) adopted under the provisions of Sections 394.21 to 394.37."

Proper zoning will complement subdivision regulations as a means of achieving the goals of the comprehensive plan. While subdivision regulations dictate minimum standards for the design of new streets and lots, it is the zoning ordinance which is the legal basis for land uses proposed by the plan.

Zoning translates the plan's generalized land use recommendations into specific requirements by establishing clearly defined use districts within the community. The zoning ordinance regulates permitted land uses, lot sizes, set backs, parking, building coverage, and related conditions of development. Normally, in instances where such development requirements as minimum lot sizes are specified by both subdivision regulations and the zoning ordinance, the requirements specified by the zoning ordinance for the particular use district will be followed. This duplication is often the result of having adopted a zoning ordinance, based upon a comprehensive plan, after subdivision regulations were adopted to prevent problems associated with poor quality development during a period of rapid growth.

Subdivision regulations must also be coordinated with an official map if one has been adopted. An official map usually designates the precise location of major street rights-of-way proposed by the comprehensive plan. Land proposed for acquisition for future parks, school sites, or similar public uses frequently included on the official map. After the adoption of an official map, no building permits will be issued for land lying within the right-of-way of a proposed street or site proposed for a public use.

There are a number of other related controls which have an effect upon development. Health regulations within a community may establish support for minimum lot size requirements in situations where wells and septic tanks are used. Restrictive covenants, or deed restrictions, although not a legal tool for local government, can supplement public control over development. These private contracts among property owners within a specific development can achieve such objectives as a certain architectural style, landscaping, and standards of site design which go well beyond the minimum standards proper for govermental regulations. It should be pointed out that such restrictions must also conform to any subdivision regulations adopted by the governing body. Whenever restrictive covenants are submitted with a subdivision plat, it is important that they be reviewed by the community's attorney.

Developing Subdivision Regulations

This manual does not include any model subdivision regulations which could be readily adopted by a community. Because of the emerging trends and new concepts in land development during recent years, many standards and procedures recommended by a model ordinance would tend to become dated or even obsolete in the near future. Also, the specific standards and procedures should be developed with the individual needs and conditions found within each community and geographic area in mind. Topography, soil conditions, snowfall, population density, and service requirements all have a bearing on the design and engineering standards which are included in subdivision regulations. For example, standards written for agricultural areas within

southern Minnesota may not be reasonable or acceptable for communities along the north shore of Lake Superior.

There are, however, a number of design principles and administrative procedures which should remain valid and provide a general guide during the foreseeable future. The intent will be to "talk through" a typical format which is applicable throughout the state. Most regulations contain the following:

1. General Provisions or Introductory Material
2. Definitions
3. Procedures for Plat Submission
4. Plat Specifications
5. Design or Development Standards
6. Administration or Miscellaneous Provisions

Each of the above major sections contains detailed provisions which may vary according to local needs. A discussion of each section is included along with brief comments about the major provisions included within each section.

General Provisions or Introductory Material

A common practice in writing regulations is to start with a statement or statements which outline the legal basis for the regulations, a general policy guide to their application, and a statement of adoption. Frequently, the appropriate section of the State enabling legislation will be cited along with objectives specified for the local community. A "typical" municipal subdivision regulations ordinance might include the following introduction and general provisions:

City of _____, Minnesota

Ordinance No._____

AN ORDINANCE ESTABLISHING RULES AND REGULATIONS FOR THE SUBDIVISION AND PLATTING OF LANDS, DEFINING CERTAIN TERMS, PROVIDING FOR THE PREPARATION OF PLATS AND THE INSTALLATION OF STREETS AND OTHER IMPROVEMENTS, ESTABLISHING PROCEDURES FOR THE APPROVAL AND RECORDING OF PLATS, PROVIDING FOR AMENDMENTS OF THIS ORDINANCE AND PRESCRIBING PENALTIES FOR VIOLATIONS.

NOW BE IT ORDAINED AND ENACTED by the City Council of the City of_____:

ARTICLE 1 - GENERAL PROVISIONS

Title. This Ordinance shall be known as the Subdivision Ordinance of the City of _____.

Purpose. Pursuant to the authority contained in Minnesota Statutes, Section 462.358, this ordinance is adopted for the following purposes:

1. *To provide for the orderly, economic and safe development of land and urban services and facilities.*
2. *To promote the public health, safety, morals and general welfare of the residents of the city.*
3. *To assure equitable handling of all subdivision plats by providing uniform procedures.*

Jurisdiction. These regulations governing plats and the subdivision of land shall apply to the area within the corporate limits of the City of _____ and the unincorporated area within two (2) miles of its corporate limits; provided that the governing body or bodies of the unincorporated areas adjacent to the City have not adopted ordinances for the regulation of subdivision of land or platting; and providing further, that where a municipality lies less than four (4) miles from the corporate limits of the City of _____. These regulations shall apply only to a line equidistant from the City of _____ and the other municipality.

Compliance. After the adoption of this ordinance, no lot in a subdivision shall be sold, no permit shall be issued to alter or erect any building upon land in a subdivision, and no building shall be erected in a subdivision unless a subdivision plat has been approved and recorded and until the improvements required by the City Council relative to subdivision have been constructed or guaranteed as provided herein.

Required Approvals of Subdivision Plats. Before any plat shall have any validity, it shall have been approved by the City Planning Commission and the City Council and recorded in the Office of the Register of Deeds of the County.

Conflict. It is not intended by this Ordinance to annul or interfere with any other official regulations or ordinances of the City; provided, however, that when there is a difference between minimum standards or dimensions herein and those contained in other official regulations or ordinances of the City, the highest standards shall apply.

County subdivision regulations would generally follow a similar format. However, the leagl reference would be to the county enabling legislation, and there would be no reference to extending these controls beyond corporate limits. This section also outlines the conditions of compliance after adoption and a "safety" clause to insure that other, possibly more restrictive, ordinances are not invalidated after the adoption of subdivision regulations.

Definitions

As in the case of most ordinances, certain words within the text of subdivision regulations are used with special meaning and often repeated. To avoid misunderstandings of terms and unnecessary repitition, a section on definitions should be included near the beginning of the regulations.

Probably the most important word in the list of definitions is the word "subdivision," which is not defined by state law. A definition, similar to that previously stated in this manual, is necessary to establish a sound legal base for the regulations and to conform with the intent of the state legislation.

The Definitions section should start with a general statement such as the following:

> For the purpose of this ordinance certain words used herein are defined. The work "shall" is mandatory. Words used in the present tense shall include the future; and the singular number shall include the plural, and the plural the singular.

In order to avoid an unnecessarily wordy text, at least the following terms should be defined:

- Alley
- Block
- Building
- Building Setback Line
- Commission or Planning Commission
- Comprehensive Plan
- City Council or County Board
- Crosswalk or Pedestrian Way
- Easement
- Engineer
- Grade
- Lot
- Lot Depth
- Lot,Double Frontage
- Lot Width
- Plat
- Right-of-way
- Street, Major or Arterial
- Street, Collector
- Street, Cul-de-Sac
- Street, Marginal Acess
- Street, Minor or Local
- Street, Pavement
- Street Width
- Subdivider
- Subdivision

Definitions for the above terms will be found in Appendix B of this manual.

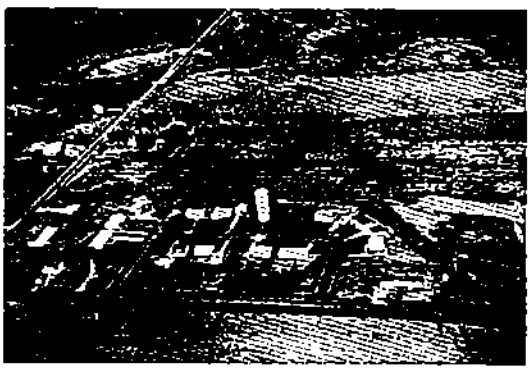
Procedures for Plat Submission

In order for a community to adopt and effectively administer subdivision regulations, it must establish a set of procedures which are in compliance with the State enabling legislation and can be uniformly applied. While these procedures may appear complicated and time consuming to many would-be-subdividers, they are necessary to insure that the intent of the regulations is carried out and to prevent mistakes which could prove costly to the community, the developer, and the eventual home buyer.

State law provides each community with considerable latitude in drafting its own procedures. However, Minnesota Statutes do require the following after a city has adopted subdivision regulations:

1) Copies of the regulations must be filed with the county register of deeds and no plats can be accepted for filing unless approved according to the terms of the regulations.*
2) A public hearing must be held before a plat can be approved.
3) When subdivision regulations are in force, no conveyance of land by reference to an unapproved plat, registered land survey, or by metes and bounds (survey description) will be permitted.

In addition to these requirements, State law allows a community to grant variances from the regulations in specific cases of unusual hardship on the land.



2. A small rural subdivision.

The Procedures section of the regulations usually starts with a general statement that requires city council (county board in the case of county regulations) approval of a preliminary plat of a proposed subdivision before any grading or other improvements can be initiated. Council approval of the final plat must be obtained before lots or parcels can be conveyed or sold, and before any building construction can take place.

Regulations used within Minnesota follow a fairly common set of procedures prior to the time a developer is actually permitted to sell lots within his subdivision. The following three steps are typical of most regulations:

1) Pre-Application or advisory meeting.
2) Submission and review of the Preliminary Plat.
3) Submission and review of the Final Plat.

Pre-Application or Advisory Meeting

Most regulations call for an informal or advisory meeting between the subdivider or developer and the community's planning commission. The purpose of such a preliminary meeting is to alert the community to the fact that developement is being contemplated and to afford the subdivider an opportunity to obtain advice and assistance before any substantial investment in time and money has been made. Since this is a pre-application meeting, no fee or formal application is required.

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*NOTE: A recent opinion of the Attorney General, Op. Atty. Gen. 125-A-66, Dec. 18, 1974, indicates that the amended County Planning Laws of 1974 no longer empower a county board to prohibit the register of deeds or registrar of titles from filing, registering, or recording instrument for conveyance of land wherein is described by metes and bounds or by references to an unapproved registered land survey or unapproved plat made after county subdivision controls become effective.

The subdivider should be prepared to discuss all aspects of the development. It is also advisable that a sketch of the proposed subdivision indicating lot arrangements, streets, and the location of the property with respect to the community be prepared for review by the planning commission. The provision of a sketch plan enables the commission (with staff assistance if a professional planning staff exists) to relate the proposed development to the community's comprehensive plan, zoning ordinance, transportation network, and utilities. Such natural features as soil conditions, geology, and ground water should also be examined to determine whether or not the proposed development is feasible and will not have a deleterious effect upon natural features and other existing developments within the vicinity.

While this phase is called an advisory meeting, its importance cannot be overstressed. The interest and assistance of the planning commission, its staff, and the community's engineer at this point can establish rapport and a good working relationnship with the subdivider early in the process and thus avoid costly misunderstandings later on.

The Preliminary Plat

After reaching some type of informal agreement with the planning commission, the subdivider prepares and submits what is commonly termed a "preliminary plat." While the name implies a tentative document, nothing could be further from the truth. The preliminary plat often calls for a great deal of engineering data; and approval by the governing body clears the way for the subdivider to actually begin the development process. A decision made on the preliminary plat is, therefore, the most important step in the entire system of procedures.

Plat submission usually follows a definite time schedule with enough copies of the plat to permit consideration and recommendations by the appropriate agencies. A typical sequence could consist of the following events:

1) The subdivider submits a specified number of copies of the plat (usually 5-10) to the city clerk along with required application form and supporting data, at least two weeks prior to the next scheduled meeting of the planning commission. A fee, based upon the size of the development, is usually required to absorb the cost of checking and verifying the proposed plat.
2) The clerk submits two copies of the preliminary plat to the planning commission; one copy to the engineer; one copy to each of the companies providing gas, telephone, and electrical service; and a copy to the District Engineer of the Minnesota Highway Department if the plat borders a Federal, State, or State Aid Highway. The county engineer should be provided a copy, if the subdivision will require curb cuts or access points on a county road. If the community exercises subdivision control beyond its city limits, copies should also be submitted to the county

board and the township governing body within which the subdivision is located.

3) Upon completion of their reviews, the above mentioned offices or agencies submit their comments or reactions to the proposed subdivision to the planning commission at its next scheduled meeting.
4) The planning commission (assisted by its staff) reviews the proposed subdivision, as well as the comments or reactions of other offices, agencies, and its engineer. If not held during this meeting the planning commission also sets a date for a public hearing on the proposal. (The city council may hold this hearing or it may authorize the planning commission to hold the hearing.) As with all public hearings, the time and place must be published at least once in the community's official newspaper at least ten days in advance of the hearing.
5) At the public hearing, the subdivider and all interested persons must have the opportunity to be heard. Upon completion of the hearing, the planning commission prepares and submits a report along with a copy of the preliminary plat to the city council. The planning commission has the authority to recommend approval, disapproval, or conditions which must be met before approval.
6) Upon receipt of the planning commission's report, the city council reviews the report and preliminary plat. The council may hold another public hearing or hearings, or take action to approve, disapprove, or specify conditions for approval of the plat.

   Council's decision must be stated in a motion. A copy of the motion is then transmitted to the subdivider by the city clerk.

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*NOTE: The terms city, city council, and city clerk are also meant to include county, county board, and county administrator, respectively, where such charges are needed in the plat submission process described.

After council approval of the preliminary plat, the subdivider is authorized to proceed with the preparation of the final plat. Council approval is normally for a one year period and does not constitute an acceptance of the subdivision. Upon approval of the preliminary plat, the subdivider may also install required improvements according to the standards established by the community.

The Final Plat

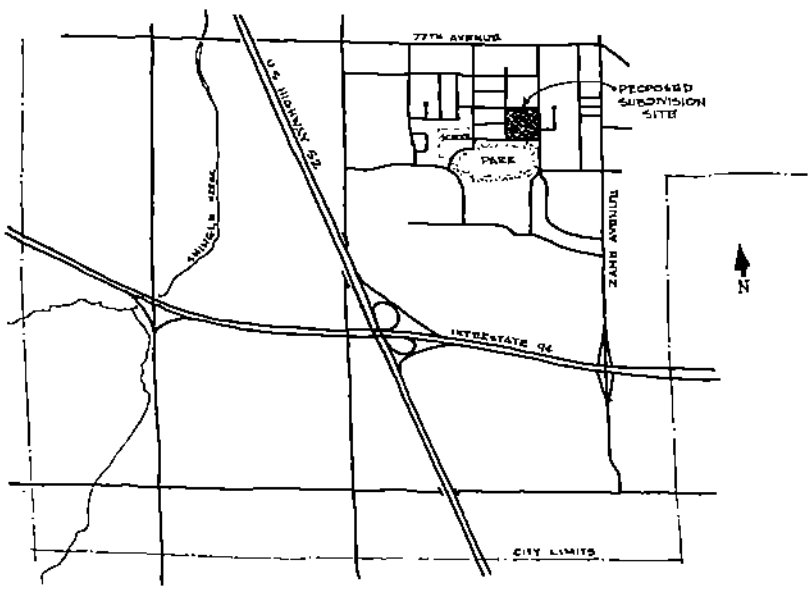
Review of the final plat represents the last stage during which the community has any control over the subdivision. The review of the final plat is really to make certain that the plat soon to be recorded will be in accordance with that which was approved earlier. In addition to assuring this conformance, the final plat provides the city engineer and

other interested agencies with a detailed, precise record of what was approved and the exact location and sizes of the various improvements which have been installed.

Most regulations require the submission of the final plat during the one year approval period mentioned earlier. If the subdivider does not meet this deadline, he will have to start over. The primary reason for this limitation, along with the fees required as a part of the preliminary plat review, is to prevent subdividers from putting the local governmental unit through the expense of the approval process when there may be no immediate intention of actually developing the land. The subdivider, on the other hand, is protected from the city making major changes in its requirements during this time. For example, a condition might be that the area could not be rezoned for at least one year.

The sequence involved in the review of the final plat is similar to that used during the approval of the preliminary plat. No public hearing is required; however, one may be held by the city council. The following points are important considerations in the approval of the final plat:

1) The final plat, in the form of a reproducible print and an adequate number of black or blueline prints, is submitted to the city clerk. The plat must be accompanied by a certificate that all required improvements have been installed in strict compliance with the standards established by the city. As an alternative, this certificate may take the form of a guarantee that all improvements will be installed. A bond or deposit of funds in escrow to cover the cost of improvements, as estimated by the engineer, is the usual form of the guarantee.



3. A location map for a proposed subdivision.

2) After being checked by the planning staff and the city's engineer, the final plat is referred to the city council.

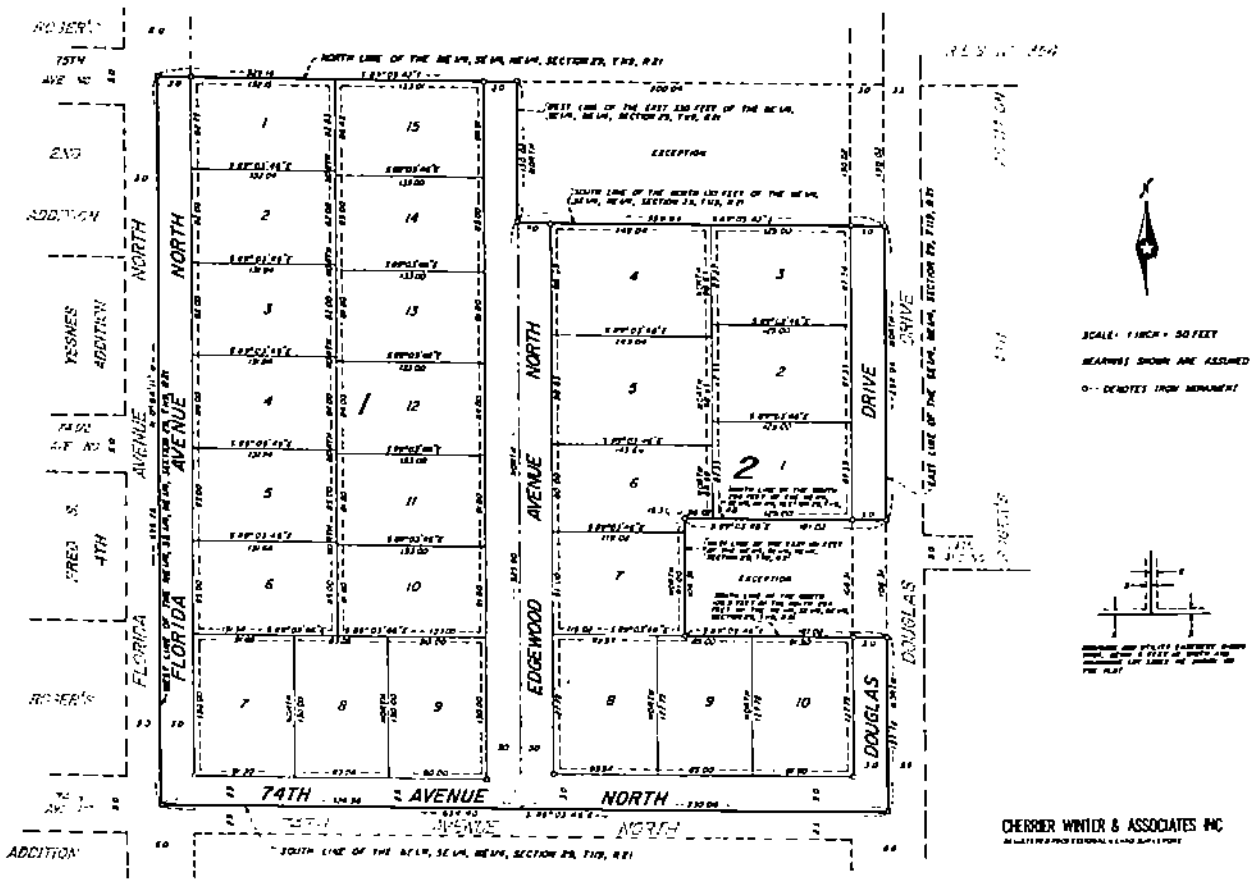
It is the responsibility of the engineer and the planning staff to determine whether or not the final plat is in substantial agreement with the preliminary plat as approved and that it meets all requirements of the regulations and other ordinances.

3) The city council, after receiving the final plat and recommendations from the engineer and planning staff, may approve, disapprove, or set forth conditions for approval. This action is primarily dependent upon the conformance with the preliminary plat. The subdivider is notified of the council's decision by the clerk.

If the council approves the final plat, it must adopt a resolution which formally approves the plat and accepts streets, alleys, easements, and park areas which are dedicated to public purposes.

4. An example of a final plat in Brooklyn Park, Minnesota.

RUSTIC OAKS



If the council disapproves the final plat, the reasons for such disapproval must be forwarded to the subdivider through written notice by the clerk. Obviously, any disapproval at this point would be only if the plat departed appreciably from the preliminary plat and if the improvements have not been installed.

4) The final plat must then be filed and recorded with the county register of deeds before the sale of any lots within the subdivision can take place. If the final plat is not recorded, within a specified number of days, the approval by city council becomes null and void.

Filing and recording of the subdivision plat serves two important purposes. It first of all constitutes a legal dedication to the public of streets, parks and utility easements. Secondly, the recorded plat is a convenient method of describing a particular lot within a subdivision. Instead of the cumbersome metes and bounds description, a plat map immediately identifies the many details of the typical subdivision. The plat map also allows potential lot purchasers the opportunity to see the relationship of their lots to other lots, streets, and public facilities within the subdivision; and it provides them some assurance that a binding legal commitment has been made for the provision of all public facilities and utilities shown by the plat. Finally, many lending institutions insist upon an approved and recorded plat before any financial commitments are made.

Plat Specifications

While most regulations are written with only a sketch necessary for the pre-application of advisory meeting, the information required for the submission of the preliminary and final plats is considerable and precise. Because of this fact, the importance of the advisory meeting bears mentioning again. To avoid any costly misunderstandings once the preliminary plat has been prepared and submitted, a clear understanding of the proposed subdivision by all concerned must result from this initial meeting. While minor modifications usually can be made between the approval of the preliminary plat and the submission of the final plat, any substantial changes could greatly prolong the approval procedures at a considerable expense to the subdivider. Once improvements have been approved and installed, however, any changes would be out of the question.

The application for approval of the preliminary plat should include the following data and maps:

1) A site map of the proposed subdivision and all land within 300 feet of the subdivision. The site map usually indicates contours, existing and proposed streets, utilities, natural features, adjacant property owners, areas subject to flooding, tract boundary, zoning classifications, total acreage in the subdivision, and other related information.
2) The preliminary plat itself, which should be drawn at a scale no smaller than 100 feet to the inch and indicates the layout of proposed streets, lots and any land to be

dedicated or reserved for public use. (A suggested checklist of data requirements for plats will be found in Appendix C.)

It should also be pointed out that if the subdivider plans to add further restrictions to the proposed subdivision, in the way of a protective covenant or deed restrictions, a draft of these proposed restrictions must be submitted with the plat. In addition, if the preliminary plat consists of replatting an older, undeveloped plat, the lot and block arrangement of the original plat must be indicated by dotted or dashed lines along with the plat's original name.

3) Engineering plans, which show the profiles, cross sections, and supportive data for all new streets, alleys, water mains, storm sewers, and sanitary sewers.

   In addition, a report on the feasibility of making a connection to the existing sewerage system should be included along with the distance from the subdivision to the nearest public sewer, anticipated additional service load created by the proposed subdivision, and whether or not the treatment plant can accommodate the additional service load. Similar information should be obtained for the water supply.

   Where connection to a public sewerage system is not feasible, a report should be required detailing such alternatives as on-site sewage disposal. The report should contain maps and data indicating water courses, ground water table elevations, and the results of soil absorption tests for individual lots if individual septic tanks and disposal fields are planned.

COMMENTS: The preceding preliminary plat requirements, along with other material presented in this manual, generally indicate the extent of detail and control which a community can exercise over potential new development. An important consideration is not merely the internal requirements of the subdivision, but also the relationship of the subdivision to its surrounding environment and any potentially damaging impact that it may have upon that environment. The creation of serious flooding in nearby areas and undue burdens on such community services as sewer and water are only a few examples of such consideration.

Final plat requirements are nearly identical to those of the preliminary plat. The main distinction is that while the preliminary plat need only be reasonably accurate (with the exception of the boundary line survey), the lines shown by the final plat must be sufficiently accurate to be reproduced on the ground. Dimensions must be accurate to the nearest hundreth (.01) of a foot; and, the exact location of all monuments or markers must be shown. For recording purposes, the final plat must be prepared in accordance with the provisions specified in Chapter 505 of the Minnesota Statutes.

In addition to the plat itself, notarized certification must be provided by the owner and any mortgage holder of record

covering plat adoption, dedication of streets and other public areas in a form approved by the community's attorney. There must also be certification by a registered land surveyor to the effect that the plat represents a survey made by him and that monuments and markers shown thereon exist as located and that all dimensions and geodetic details are correct.

In addition, certification is required showing complete payment of all taxes and special assessments on the property. The plat must also make reference to any private restrictions or protective covenants covering the plat along with any construction plans prepared under the direction or approval of the city council and the city engineer.

Design Considerations

Design or Development Standards

Attractive subdivisions cannot be accomplished by legislative measures or ordinance requirements. Because they must be uniformly applied to all proposed developments, subdivision regulations are minimal and by their very nature can only impose reasonable standards of design upon each proposed new addition to the community. The generally time-tested standards included in most subdivision regulations relate more to the engineering of streets and utilities for maximum safety, efficiency, and economies of maintenance than they do to the promotion of aesthetics.

There are, however, a number of ways a community's planning commission and staff can influence subdivision design. The plat review procedures outlined earlier provide ample opportunity for design suggestions to be made. A planning staff member with a background in subdivision design can often make substantial improvements to a subdivider's original concept. Many times, these suggested design changes have been readily accepted by a prospective developer, particularly if such changes can be shown to improve his eventual lot sales. Again, early understanding on the part of the subdivider, the planning commission, and other municipal officials is very important in achieving coordinated action during the plat submission procedures. Ample study at the beginning of the process is the only way to insure that the proposed subdivision will fit properly into the community's plan for the future as an asset and not become a financial liability.

In the design or review of subdivisions, there are two basic areas of consideration:

1) General provisions, or the analysis of the proposed subdivision in relationship to its setting and surroundings.
2) The design of the plat itself, or the analysis of the proposed subdivision's street, lot, and utility layout.

Subdivision Site and Surroundings

The first of these areas of consideration has become increasingly important during recent years with the growing concern over the environment and continued urban sprawl.

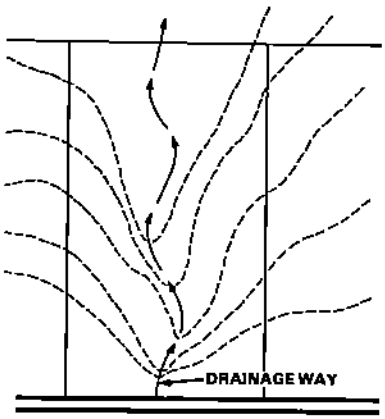
As a starting point, the proposed subdivision must be examined in terms of its relationship to the comprehensive plan (if one exists). If the plan has been formally adopted by the community, the proposed subdivision must by law conform to its objectives. Incompatibility with the plan is sufficient grounds for a planning commission to reject the proposal until it is redesigned to conform to the plan. Important points to consider in this regard consist of the following:

1) The land use plan and zoning map must indicate generally the same development as that proposed by the subdivision.
2) The proposed subdivision must conform to the plan for future major streets. A subdivision plat which ignores a proposed major street should be promptly rejected by the planning commission; however, the main access to the subdivision should be from a major street, and not from an existing minor or local street. This is particularly true if the subdivision is large (possibly over ten lots) in order to avoid overburdening the existing local street with unnecessary traffic and safety hazards.
3) The proposed subdivision must fit into the community's plan for future parks, and other public needs. As mentioned earlier, the community has the option of requiring a portion of the land area of the subdivision to be dedicated for public use or an equivalent amount of cash to be contributed for public land purchase. Usually, these two options are included within the Design or Development Standards section of the regulations and typically require that five percent or more of the subdivision's area be dedicated for public use or that five percent or more of the subdivision's market value be contributed in cash.

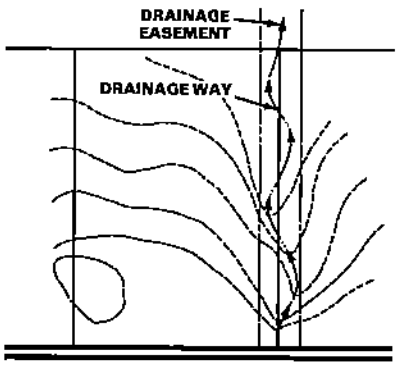
Whether or not an adopted plan exists, it is important for the planning commission to make a careful analysis of the proposed subdivision's site and its surroundings. In the case of existing streets and adjacent land use patterns, common sense--in the absence of a comprehensive plan--will often indicate logical routes for through traffic or collector streets and whether or not the proposed subdivision will be compatible with surrounding development. An obvious example in this regard might be the unwise location of a new residential subdivision near an area used by heavy industry.

Utilities

The proximity of adequate utilities, primarily water mains and sanitary sewers, can mean the difference in approving or rejecting a subdivision plat. This is particularly true if soil conditions indicate that the area is unsuitable for septic tank operation. The absence of nearby utilities is a legitimate reason for the planning commission of a community to recommend denial of the plat to the city council. The construction of new mains or trunk lines to service a proposed subdivision at a distance from the existing utility system could become an unfair burden for the community at large and open the door for additional premature development.



5. An undesirable building site.



6. A better building site made possible through the use of a drainage easement along the lot line.

Source: Control of Land Subdivision, State of New York, Office of Planning Coordination.

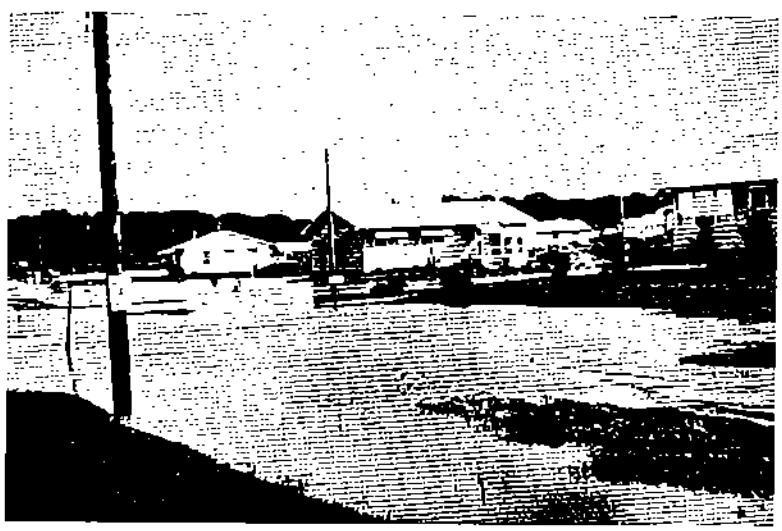
Even when the proposed subdivision is near the existing utility system, care must be exercised. Significant changes in elevation can pose such problems as lack of water pressure, inadequate sanitary sewer grades, and poor storm water drainage. Since the grades of streets affect the adequacy and cost of such utilities, careful analysis is required to prevent mistakes. If there is serious doubt, the planning commission should consult an expert in the field of municipal engineering.

Drainage

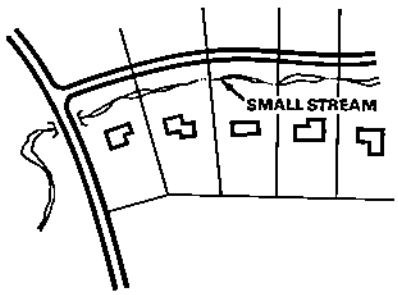
Storm water runoff will be increased with development because roofs, driveways, street paving, and even lawns are less absorbent than the natural landscape or farm land. The plat must include provisions for accomodating this runoff without damaging adjacent properties, or imposing additional burdens further away. It should also be kept in mind that any areas subject to flooding on the site may be enlarged as a result of subsequent land development due to this increased runoff.

Small streams and drainage ways should be accurately shown on the site map. Drainage ways should not flow through the center of a lot since it would create an undesirable building site, or require costly fill. The lot layout, however, should be made to conform to the drainage pattern by placing a side lot line on the drainage way and using an adequate easement on each side of this line. Lot widths along this easement may need to be increased to provide ample building sites.

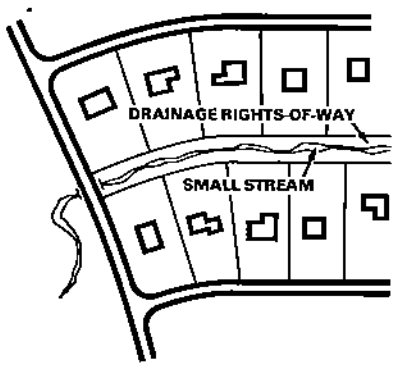
Small streams can often be preserved in their natural state through the provision of a suitable easement or drainage right-of-way. As in the example, the natural stream bed provides a pleasant buffer between residential lots, and avoids the need for costly, undesirable culverts.



7. The unfortunate results of platting land subject to flooding.



8. Poor platting around a small stream.



9. The same stream used as a design feature and a buffer along the rear lot lines.

Source: Control of Land Subdivision, State of New York, Office of Planning Coordination.

Topography

Site topography is probably the most crucial determinant in subdivision design. It is, therefore, essential that accurate contours be shown on the site map. In the case of very steep slopes, topographic mapping can actually indicate whether or not a traditional development of single family, detached homes is practical, or even possible. (Special hillside regulations have been developed and used by communities containing significant areas of steep slope. These regulations dictate certain standards of residential development or subdivision layout which are tailored to these steep slope areas.)

In addition to its use in determining acceptable grades for streets and storm water drainage, topographic maps often indicate the location of rock outcrops water bodies, low areas, and other physical features. Higher elevations of the site can be pinpointed and analyzed for potential views. While a planning commission is not charged with the task of subdivision design, it can often persuade a developer to modify his layout to enable more homes to share any potential views.

Soils and Geology

It is frequently necessary to require some information about the site's soils and geology. As mentioned earlier, certain heavy soils--such as dense clay--will not support septic tanks and disposal fields. The absence of sewers within or near such areas would indicate that subdivision platting should not be allowed. These soil conditions when accompanied by a high water table would tend to create undesirable building sites even when municipal sewers are near by, since wet basements are likely to result unless extraordinary precautions are taken. Shallow soils and sub-surface rock can also pose development problems in the way of costly street, utility, and footing or foundation wall construction.

Many areas of Minnesota are covered by quite detailed maps of soils and underlying geology. It is always advisable to consult such maps when available, and if any question of subsurface conditions exists. Where these maps are not available the information may have to be assembled from local knowledge of the area, aerial photograhs, and other data sources.

Other Physical Features

Recent years have seen renewed interest in preserving as much of the natural landscape as possible. Clean sweep bull-dozing is no longer accepted by society or the potential home buyer. Stands of trees should be shown on the site plan and every effort should be made to preserve as many of the existing healthy and wellsited trees as possible. As will be mentioned later, modern cluster subdivisions and planned unit developments can often result in less tree removal and environmental damage than the more traditional development. Mature trees unquestionably increase the value of lots since they provide an amenity that barren sites may take many years to match.

As with trees, water bodies, and streams which were already mentioned, interesting rock outcroppings or other terrain features may contribute to the natural beauty of the site. In some cases, manmade features--such as stone walls, fences, old barns and silos, or orchards--can also provide interesting attractions which blend with the countryside and may provide the development with a unique identity or focal point for neighborhood activities.

Street and Lot Layout

Traditionally, subdivision regulations have spelled out the standards for street and lot layout in considerable detail. Although many of the standards developed and used by communities were designed to meet specific local conditions, others have general application and are simply the results of sound engineering practices, or in some cases, empirical information. This discussion of street and lot layout will be concerned with only those standards which have general application to Minnesota communities.

As mentioned before, any proposed subdivision must conform to the community's plan for major streets and all existing streets which lie adjacent to the area. While slight modifications to the street plan may be permissable, close conformance is necessary to preserve the integrity of the plan and its future realization. The subdivider must be made aware of any future street extensions within the area of his proposal early in the review process to permit him to accommodate the future street before he has invested a substantial amount of time and money. If the subdivision is large, it is also important that any major street proposed by the developer be in conformance with the major street plan and the standards of the city or county.

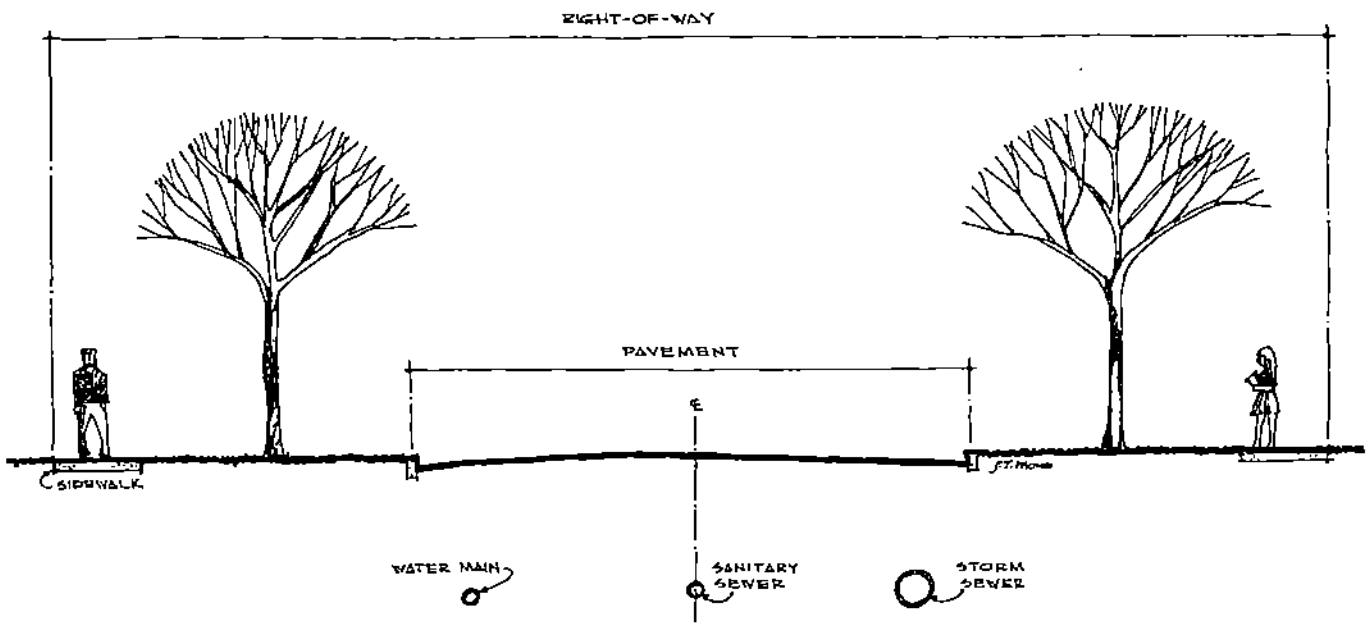
The main purpose of residential streets is to provide access to individual pieces of property and accommodate traffic generated by property usage. Streets must also be designed for the convenient entry of snow plows, various types of maintenance vehicles, fire fighting equipment, and ambulances. Therefore, new streets must be properly related to the topography; coordinated into a logical, easily understood system; and of suitable widths to serve their intended functions.

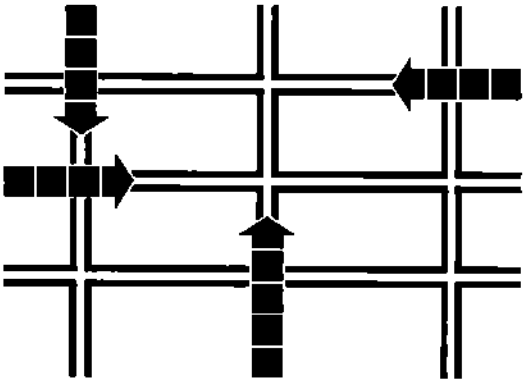
Functions of a proposed street will determine its right-of-way width and its pavement width. A minor street designed to serve a low density residential area, for example, should have narrower pavement than a street serving higher concentrations of residential development or non-residential uses. A minimum pavement width for such low density development, typically family oriented, will discourage through traffic, high speed, and a subsequent increase in volume. On the other hand, greater width is required for higher density residential development and business uses becauses of the increased amounts of traffic generated and the greater reliance placed upon the street for parking.

Collector streets and arterials or major streets are designed to carry progressively higher traffic volumes through a large subdivision development or from one geographic area of a city or county to another. This fact must be reflected in the criteria established by the local governmental unit for determining street paving widths or cross-sections. Such features as sidewalks, planting strips or boulevards, and utilities affect the street right-of-way and must be considered also.

In addition to widths, maximum and minimum grades are very important to the proper layout of streets. While acceptable maximum street grades vary with the functional classification of the street, climatic conditions, and the general nature of the topography within a particular city or geographic region, a minimum grade of at least 0.5 percent is usually required to allow for adequate drainage. Higher rates of speed, greater sight distance requirements, and the wider variation of vehicles on the roadway dictate that collector streets and arterials be constructed with more gradual grades than minor or local streets. It also must be remembered that sanitary and storm sewers are customarily located within street beds and usually operate on a gravity-flow system. To avoid excessive costs for excavation or pumping and to facilitate proper flowage, streets must follow reasonable topographic conditions. An excessively steep grade could prevent sewers from being placed within the street and thus require the additional expense of a utility easement.

10. Typical street right-of-way in an urban or suburban setting.





11. A grid street pattern tends to encourage through traffic on each street.

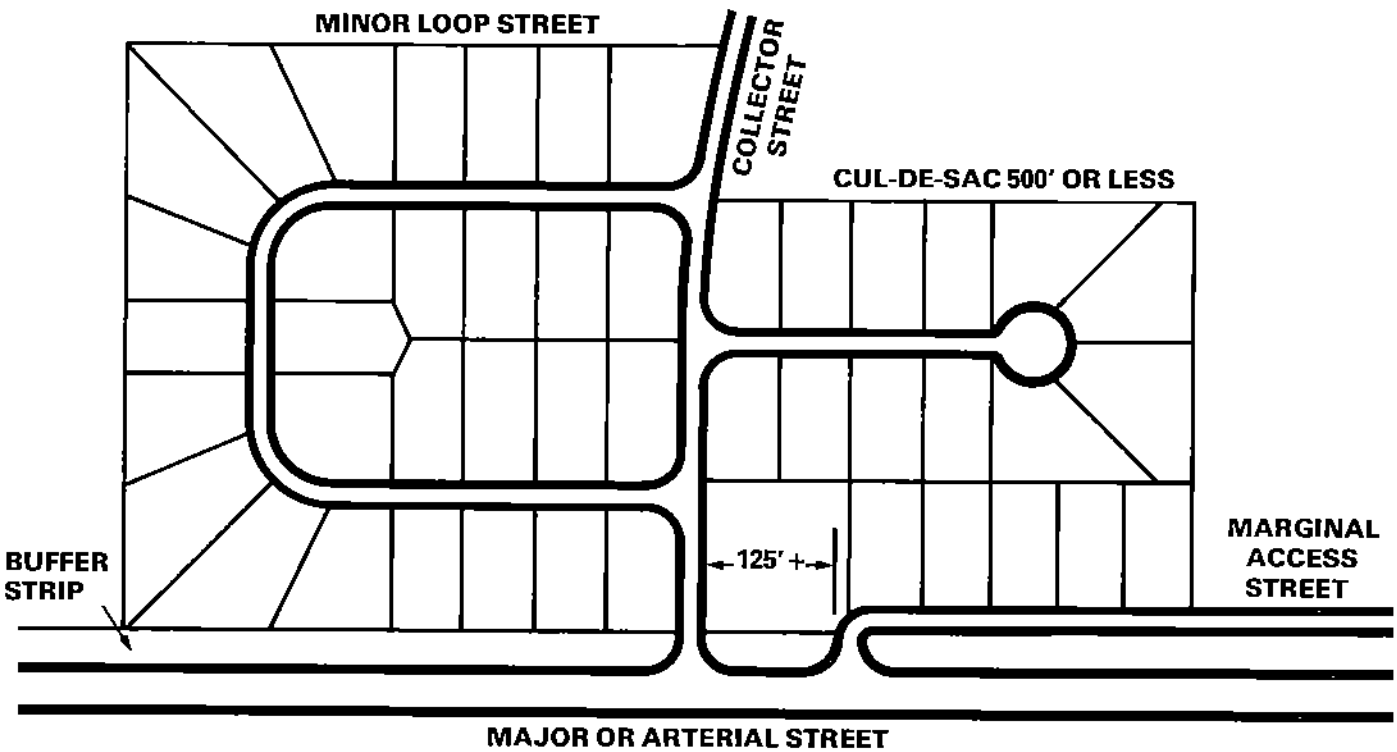
The following chart presents a general range of standards which are in common usage throughout Minnesota for the various functional classifications of streets:

Type of Street	Development	Right-of-Way Width	Pavement Width	Max. Grade
	Residential			
Minor or Local	Single Family	60' – 66'	26'	10%
Minor or Local	Multifamily	60' – 66'	32'	10%
Collector	– –	70' – 80'	44'	8%
Major or Arterial	– –	100' –150'	60'+	6%

It should be kept in mind that such standards are merely representative, and should not be adopted by any community without a careful analysis of its own particular needs. While right-of-way widths of 50 feet or even less may be acceptable for some regions of the United States, the need for snow storage space between the street pavement and sidewalk indicates that a wider right-of-way is required for the "typical" street within Minnesota communities.

Older cities are usually characterized by an undifferentiated rectangular or grid street pattern. Each street was originally of equal importance with its neighbor. In addition to the added hazards created through the multiplication of fourway intersections, which is typical of most grid plans, this pattern encouraged through traffic at higher rates of speed on all streets. Ultimately, there was a deterioration of the residential frontage along the streets which eventually carried the major traffic volumes.

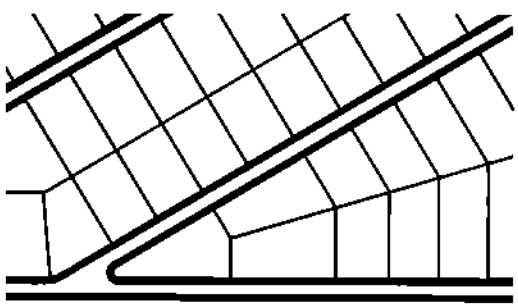
12. The functional classification of streets in a subdivision layout.



As shown by sketch 12, differentiation between functionally classified streets can be accomplished through the design of the subdivision layout itself, as well as through the use of varying street widths. The "loop" street provides convenient access to each lot while also discouraging through traffic, which is carried through the subdivision by the adjacent collector street. It should also be noted that no lots front on the collector street. While not absolutely essential, it is highly desirable to avoid fronting lots on a collector street because of increased safety hazards on the adjoining properties and such conditions tend to decrease the traffic carrying capacity of the collector.

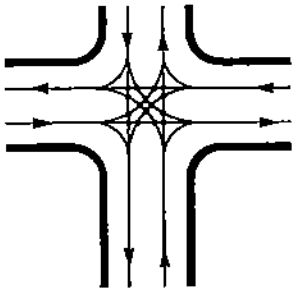
A cul-de-sac or dead-end street also presents many advantages to the potential home owner. Through traffic is completely eliminated because there is only one entrance; thus, a sense of privacy, enclosure, and added safety is created. Acess to the interior lots, however, can be impeded by blockage at the open end due to fire or emergency equipment. If the cul-de-sac is too long, traffic generated by the homes along the cul-de-sac can become undesirably high. For these two reasons, it is recommended that a cul-de-sac generally be no more than 500 feet in length and be furnished with paved turn-arounds with at least a 40 foot radius.

Whenever residential development is platted along major streets or highly travelled arterials, its design needs special consideration. Single family house lots should not front on or have direct access to such busy streets. As mentioned earlier, homes fronting on major thoroughfares or busy streets not only create unnecessary safety hazards but also reduce the efficiency of the street to carry traffic. Subdivision regulations should be written to prevent such undesirable conditions, which can usually be accomplished through the use of a marginal access street (see sketch 12). In order to insure the amenities sought by families in individual homes and reduce traffic noise, it is important that a landscaped buffer strip be placed between the marginal access street and the adjacent thoroughfare. Sufficient space (at least 125 feet) should be allowed between the entrance to the marginal access street and other street intersections with the major street or arterial. Potential conflicts can be further reduced through a re-orientation of the lots to face away from the major street and the introduction of a landscaped buffer strip along the rear property lines. The construction of a fence can provide for additional privacy and safety within backyard areas.

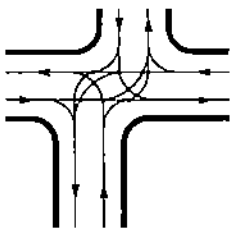


13. A dangerous intersection with an undesirable lot arrangement. Street intersections should be at right angles if possible.

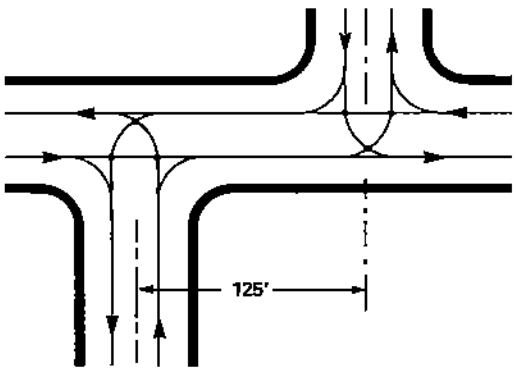
Properly designed intersections are another important element in subdivision street layout. Design standards should be written to prevent the hazards and awkward turning movements created by diagonally intersecting streets. Ideally, streets should intersect at right angles; however, most regulations permit the angle of intersection to vary between 70 and 90 degrees if conditions are such that a right angle intersection would be impossible or extremely difficult to construct.



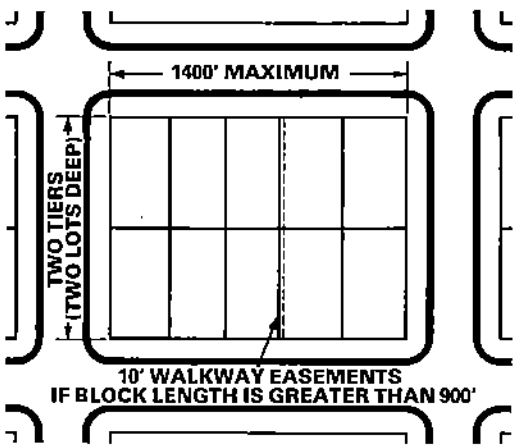
14. A four-way intersection with 16 collision points.



15. A jog intersection with a dangerous traffic pattern.



16. A three-way, or offset intersection with only 3 collision points.



17. A typical lot layout of a block within a grid street pattern. Note pedestrian way.

Fourway intersections should be avoided, with the exception of collector streets or major arterials where traffic control devices are used. In addition, intersections should occur on straight segments of streets and not on curves if at all possible. This is particularly important when a minor or local street intersects a street which carries greater volumes of traffic at higher speed. Because of dangerous traffic patterns with twice as many collision points, jog intersections should not be permitted. The design standards should require a minimum distance of 125 feet between the center lines of offset streets at their intersection with another street (see sketch 16).

There are a number of other standards of design which govern the layout and engineering of streets. Most of these are for safety or convenience; and consist of such requirements as rounded corners at intersections (radius of 20-25 feet) to facilities turning movements, minimum radii on horizontal and vertical curves to insure adequate sight distance, and minimum tangents between reverse curves to minimize the chance of the motorist losing control while negotiating the curves.

Obviously, the blocks which make up a subdivision are inherently related to the pattern of streets. For safety and lower construction costs, it is generally recommended that intersections be kept to a minimum while at the same time imposing limitations on block length for the convenience of pedestrians and motorists. Minimum block lengths of 500 feet and a maximum length of 1,200 to 1,400 feet are typical of the design standards included within most subdivision regulations. While standards governing minimum block lengths had more importance in the layout of older, grid patterned developments, the need for reasonable maximum limits on block lengths is still of importance today in order to insure convenient access from one part of the subdivision to another.

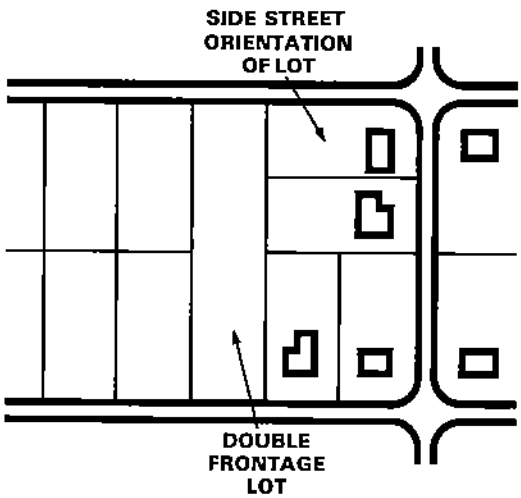
Ideally, blocks should be around 700 feet in length and be of sufficient width to allow two tiers of lots within the block area · providing, of course, that the block consists of two, generally parallel streets. It is common for regulations to specify pedestrian ways or easements through blocks which are over 800 or 1,000 feet in length. While this may appear highly desirable from the standpoint of pedestrian convenience, unless adequate provision is made for maintenance and lighting such requirements may result in a seldom used nuisance. If the pedestrian way is heavily used, it may become a noise and litter problem for adjacent homes. Before such provisions are written into the regulations, it is first necessary to determine whether or not the community is willing to maintain and illuminate these pedestrian ways as public walks. There are also such additional considerations as assessing the maintenance costs and preserving the privacy of nearby homes.

Most subdivision regulations today do not permit alleys within proposed residential developments. (They are,

however, often required in any subdivisions designed for commercial or industrial use.) It is frequently necessary to provide utility easements along rear lot lines for electric power lines, which are usually buried in the modern residential subdivision. Upon occasion, it may prove necessary to place storm sewers, sanitary sewers, and water mains with such utility easements as well. These easements should consist of a clear zone or minimum width of 20 feet to permit the entrance of maintenance or construction equipment.

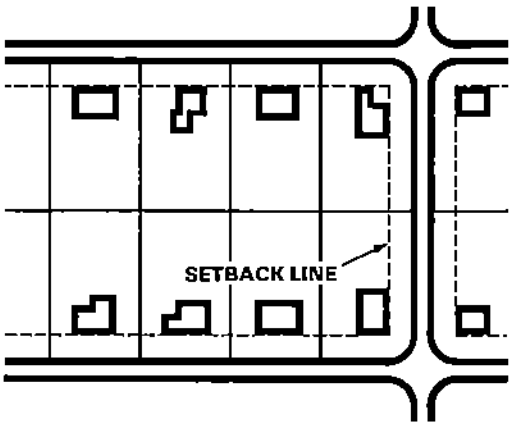
As briefly mentioned earlier, the layout of streets, blocks, and finally lots are interrelated to the point that one cannot be designed without considering the others. Within communities which have adopted a zoning ordinance, the first requirement of the subdivision regulations is that the proposed lots conform to the zoning district within which the subdivision is located. The zoning district regulations will specify the permitted use, lot area, and lot width as a minimum. Sometimes the minimums specified by the zoning ordinance may be out-of-date or inadequate by today's standards; and the community may wish to include minimum lot requirements within its subdivision regulations which exceed those found in its existing zoning. For example, a zoning ordinance is partially based upon existing development and may specify a lot width of 50 feet for detached single family dwellings. With the popularity of the ranch house and similar styles of wider homes since the end of World War II, a lot width of 50 feet is no longer acceptable to today's home buyer. For this reason, and the fact that the community may be exercising subdivision control over areas which are not covered by zoning, the community may want to include higher standards for lots in its subdivision regulations. The following chart presents a range of minimum lot standards in general use within Minnesota:

Lot Type	Lot Area	Lot Width
With Public Sewer and Water	8,000 Square Feet	70 Feet
With Public Sewer OR Water	15,000 Square Feet	80 Feet
Private Well and Septic Tank	20,000 Square Feet	100 Feet

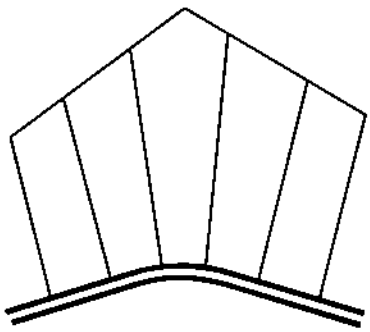


18. Some common platting mistakes create double frontage lots and poor corner lot orientation.

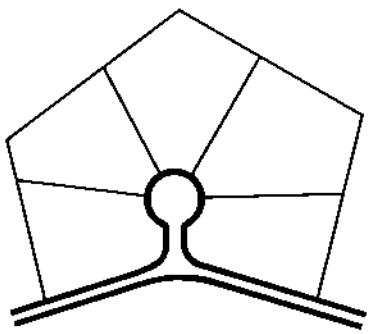
Subdivision regulations cannot insure the design of a perfect lot. However, there are a number of principles which should be incorporated in the design standards to at least insure suitable lots for home building. In addition to establishing minimum acceptable lot sizes, it is usually desirable to require that lot lines be substantially at right angles to straight streets and radial to curved streets. Double frontage, or through lots should be avoided because of the added cost of constructing and maintaining two streets - costs which will ultimately mean higher assessments for the property owner involved. The through lot can also create problems in a situation where adjoining property owners cannot agree on which direction their houses should be faced. Corner lots should be larger than interior lots to allow space for required setback from each street and provide suitable backyard space.



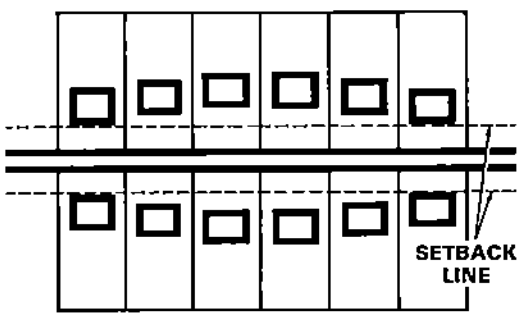
19. Corner lots require greater width because of setback requirements from side streets.



20. Excessively deep lots along an existing road.



21. A better lot layout through the use of a short cul-de-sac.



22. Varied building setback used to avoid the monotony of a long residential street.

The corner lot's orientation must also be considered to prevent a house on a corner lot from being built to face a side street rather than the street faced by its neighbors. Because of the wide variations in subdivision design, however, there can be exceptions to this general rule.

As mentioned earlier, trees and other natural features are important considerations in the design of subdivisions and lot layouts. Grading of each lot should be kept to a minimum, and it is usually desirable for the building site to be somewhat above the abutting street to allow for adequate surface drainage. Variation in grade should not be excessive, but it is important to provide drainage away from all sides of each house into adequate storm sewers or a drainage easement.

In addition to written block and lot design requirements, the suggestions of a planning staff or commission can often improve a proposed subdivision in specific problem areas. For example, the platting of excessively deep lots along an existing road or street may conform to the letter of the subdivision regulations but result in undesirable lots (see sketch 20). Through the use of a short cul-de-sac, a more desirable arrangement of better building lots can be created.

Strict adherence to building setback line requirements, as outlined in the zoning ordinance or subdivision regulations may result in a monotonous appearance along long streets. By suggesting that groupings of houses be set a few feet (not more than 10 feet) behind the established building setback line, a more pleasing appearance can be created. Obviously, a suggestion of this type is more workable when the subdivider is also the home builder.

New Concepts in Development

Most of the material covered by this manual pertains to the standard or conventional type of subdivision, which typically consists of a tract of individual lots for single family, detached houses. While the bulk of new development is still of this type, there has been a growing trend during recent years toward such new innovations as cluster development and planned unit development. Within the past 10 years, more than 100 PUD's (planned unit developments) have been completed or are currently underway within the Twin Cities Metropolitan Area alone.

The PUD is a concept of land utilization in which the entire tract is planned and developed as a unit rather than as an aggregate of houses on individual lots. The advantage of this type of development is its flexibility in creating a variety of housing styles and the retention of open space for common recreational use. By concentrating housing units more of the natural environment can be preserved and enjoyed by the residents of the development.

In addition to providing a wide variety of

housing--townhouses, apartments, patio homes, duplexes, and single family houses--the PUD frequently provides a coordinated system of pedestrian ways which are separated from automobile traffic. As is true of most new residential developments, all utility lines are underground; and, depending upon the size of the PUD, most provide a variety of tot lots, parks, tennis courts and similar recreational areas. Most of the larger PUD's contain convenience centers or small neighborhood shopping centers. The largest developments frequently include schools, churches, major shopping centers, office and even industrial parks. The "cluster" development has some of characteristics of a PUD; however, the scale of development is usually smaller and it is commonly limited to single family homes or duplexes. The term "cluster" refers to the grouping of lots around culs-de-sac or short loop streets for the purposes of preserving open space and creating a more intimate residential environment with greatly limited automobile traffic. The important feature of cluster development is that lots smaller than those required by ordinance are permitted, and the excess land thus created is place in commonly held open space. For practical purposes, a cluster development is really a small PUD project.

23. A PUD or residential cluster used to preserve the amenities of open space.

Cluster developments and PUD's usually require modification in the design standards of the traditional subdivision regulations and zoning ordinance. In order for these developments to take place, the strict compliance to minimum lot sizes, setback lines, and similar requirements must be waived by the Planning Commission and governing body. While development is generally more concentrated, the important consideration is that the overall density (number of housing units per acre) of the entire area is consistent with that which would have been permitted under the strict application of the regulations or ordinance.

Zoning ordinance requirements usually have a much greater impact upon the PUD than the subdivision regulations, although the design standards of a community's subdivision regulations should contain provisions for this type of development and make reference to the zoning ordinance as well. While the acceptance of a given PUD is largely determined by the zoning ordinance, such requirements as streets and utilities must be related to the standards found within the subdivision regulations. For example, it may be desirable to allow streets to be narrower than those permitted under the strict application of the regulations. This would be particularly true within a small cluster development of a few houses around a short street. However, it probably would be unwise to relax the standards covering street grades or the quality of improvements. Private streets should be avoided if at all possible since eventual maintenance problems could result. If private ownership is retained, the streets should still comply with the subdivision regulation's design standards.

An additional consideration in the review of any PUD proposal is the question of management and maintenance. Since much of the area is held in common by the residents, costs for management and maintenance are paid by levying fees against all home owners within the development. Typically, this is accomplished through a homeowner's association. The by-laws, organizational framework, and system of fees of these associations should be reviewed by the city attorney to prevent any future problems.

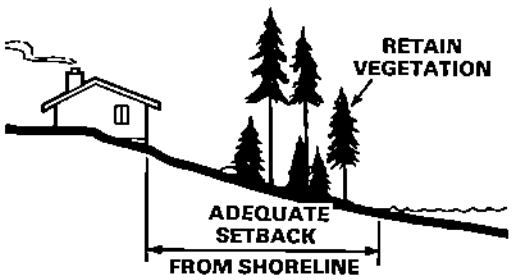
Shoreland and Rural Development

With over 12,000 lakes in Minnesota, it is extremely important for many communities to make special provisions for shoreland developments in the preparation of subdivision regulations. As briefly mentioned earlier in this manual, the Minnesota State Legislature passed the Shoreland Management Act in 1969 to deal with the problems of waterfront development and insure the preservation of the natural environment. It was fully recognized at that time that failure to use this valuable resource properly would result in an ever increasing deterioration of that environment.

Minimum standards and criteria for the use and development of shoreland areas were developed by the Minnesota Department of Natural Resources. The Act additionally required each county to adopt some type of shoreland ordinance which would incorporate at least these minimum standards by July 1, 1972. All counties covered by the Act have since complied. The 1973 Legislature extended the coverage of the Act to include municipal areas.

The jurisdiction of standards required by the 1969 Act includes all unincorporated land within 1,000 feet of a lake or within 300 feet of a river or stream; and, similar to the PUD, these standards were related to both zoning and subdivision regulations. While the provisions of the Act and its standards are designed to be compatible with most zoning ordinances and subdivision regulations, there are some added

requirements which may go beyond existing, conventional ordinances. Such additional requirements, of course, must be incorporated in the standards of any existing or proposed ordinances, or used as a supplement to them. A community may also be more restrictive in its shoreland requirements than the minimum standards set fourth by the Department of Natural Resources.



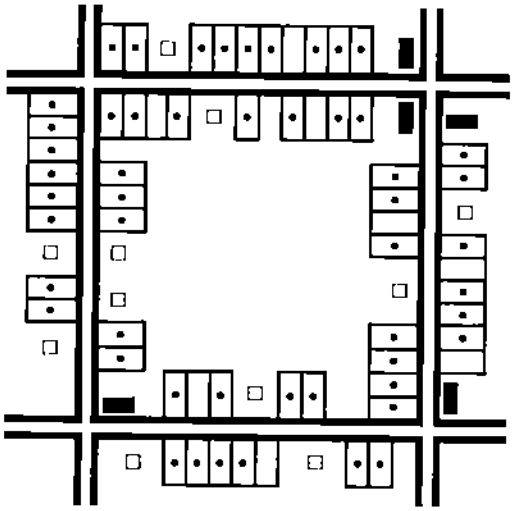
24. Important considerations in lakeshore development.

Standards for shoreland development add a new dimension to the traditional zoning-subdivision process. For example, lakes in Minnesota have been classified according to each lake's present physical characteristics and reasonable future potential. Minimum lot sizes, based upon the classification system, vary from 80,000 square feet for a lake designated as Natural Environment to 20,000 square feet for lakes in the General Development class. Minimum distance standards have also been applied to water frontage, building setback from the shoreline, and the location of a sewage disposal system's soil absorption unit from the shoreline. In addition, there are provisions which tend to restrict shoreland alterations, the removal of natural vegetation, and dredging or the construction of such improvements as canals.

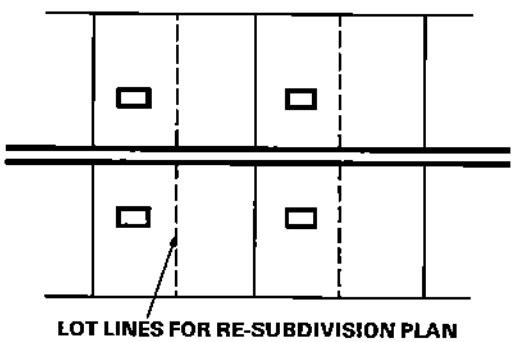
In regard to subdivision regulations, probably the most important feature of the Shoreland Management Act is the requirement that all subdivision plats within shoreland areas be submitted to the Commissioner of Natural Resources upon the approval by the county. Plats inconsistent with shoreland provisions must be submitted to the Commissioner before final county approval. The Act also recognizes the necessity that shoreland developments must conform to local standards of street or road design and other improvements. An additional provision of the Act permits the "clustering" of smaller lots for planned developments provided that central sewage facilities are installed; that open space is preserved; that only one centralized boat launching facility is provided for each cluster; and that the preliminary plans are approved by the Commissioner of Natural Resources. With the continued demand for vacation homes in the future, the clustering concept may prove to be the only equitable way to satisfy this demand and preserve more of the natural shoreland in Minnesota.

Scattered rural development of primarily non-farm residences pose numerous problems to counties and many municipalities with substantial amounts of open space. Such development patterns are typically difficult and costly to service. Areas of rural-urban fringe are presently the main focus of such development due to population growth and the increasing popularity of "a place in the country." Without sound land use planning and adequate controls over development, such growth can become a nightmare for local officials.

In most cases, development in these fringe areas begins gradually along township roads or county highways. Frequently, the eventual development pattern is one that completely rings the typical grid of rural roads (see sketch 25) and isolates the remaining interior vacant land to the



25. The results of uncontrolled platting and development of rural roads.



26. A re-subdivision plan for large lot platting. Note building locations.

point that it cannot be developed or used. Under such circumstances the traffic carrying capacity of the existing roads is substantially reduced, and traffic hazards increase sharply because of the numerous driveways along these roads. In the absence of adequate zoning, conditions are generally worsened because of the likelihood that commercial establishments and other non-residential uses will be randomly mixed with homes.

Premature subdivisions -- the "leap frogging" of new development over vacant land adjoining existing urban development in favor of cheaper land some distance away -- has greatly intensified the service cost problems of many suburban communities. Taxes produced by such developments are frequently insufficient to pay for the increased service costs which they generate.

A number of techniques have been developed and used by various suburban communities within the Twin Cities Metropolitan Area to control such developments. Large lot zoning, the establishment of urban and rural service districts, capital programming, and subdivision regulations are a few of the devices which have been employed with varying degrees of success. At this writing, the problems of controlling or managing growth or new development within these "fringe" areas have not been solved; however, subdivision regulations, used in concert with appropriate other "tools" can accomplish much. Regulations which require a high standard of improvements and design can prevent the occurence of premature, often shoddy subdivisions within outlying areas.

A common occurence around many of Minnesota's larger cities has been the large lot subdivision of agricultural land. These subdivisions often consist of lots of an acre or more which are dependent upon individual sewage disposal systems. Lot frontages of 200 feet or more are not uncommon. Because of their location near an urbanizing area, these subdivisions are eventually annexed to the city or are required to be serviced with the city sewer and water. When this occurs, the assessments for sewer and water lines can be an enormous burden to the property owner. It is, therefore, suggested that where such large lots are platted, communities should require a preliminary re-subdivision plan at the time of preliminary plat submission (see sketch 26). This requirement would provide the homeowner with some opportunity for relief by selling off a portion of his land. The result would be a more efficient use of what may be now considered urban land.

Improvements

Subdivision regulations usually specify all required improvements within a separate article or chapter following the section on design or development standards. The amount and types of improvements will, of course, depend upon whether the community is a rural county or a suburban city within a metropolitan area. Improvements must also be in

accordance with the community's existing construction standards and all other applicable county or state standards.

Because of the wide variation in standards for improvements and local engineering requirements, this manual will not include a detailed discussion of improvements. While urban subdivisions of necessity need high standards for curbs, gutters, sidewalks, street paving, sewer and water lines, street lights, and storm drains, only minimal improvements may suffice for seasonal or lakeshore development. The improvements must be consistent with the location and nature of the proposed development. In all cases, however, subdividers should be required to provide improvements which are efficient and easily maintained at a cost in keeping with the nature of the development.

In addition to the adopted required improvements and the specifications for their construction, the community will need competent engineering advice during the entire plat review process. In most cases, a qualified engineer will be needed to supervise the inspection of the work as it is completed to make certain that it meets the requirements.

27. Problems created through inadequate improvements and erosion.

Administration or Miscellaneous Provisions

While there is no set rule, the final chapter or section of most subdivision regulations is usually concerned with administrative practices and related provisions. Frequently, this final section will include procedures for field inspection of the site before and during the construction period. (The method of defraying the cost of such inspection is usually borne by the subdivider and based upon an estimate of the total cost of the improvements.) There may also be provisions for a maintenance bond, acceptance of streets and improvements, amendments, validity, variances, and penalities for violation of the regulations. When a community has adopted a building code and/or zoning ordinance which requires permits before construction, a very positive control can be exercised over questionable subdivision activity. Most of these undesirable developments can be prevented by including an administrative provision that no permits will be issued unless the lot is included in a plat that has been recorded in the office of the Register of Deeds.

State law permits communities to provide a variance in the regulations when their strict application to a specific site would result in an unusual hardship. Typically, this provision is written into regulations in Minnesota communities and requires the subdivider to make application in writing at the time of the filing of the preliminary plat. The reason for the variance must be stated fully and clearly by the subdivider.

Before granting a variance, the community's planning commission must make sure that the hardship is actually on the land and that strict application of the regulations would deny the applicant a reasonable use of his property. It must also be shown that by granting the variance, no adverse conditions will result which would be detrimental to the public welfare or injurious to nearby property.

Variances (other than for PUD's) should be granted infrequently and then only when there are special conditions which impose "real" hardships. In many instances, this is not the case. A common occurence, for example, is where a subdivider or developer tries to divide his land into the greatest number of lots possible. He barely meets the minimum standards, and then seeks permission to create substandard lots out of odd shaped or under sized remnants of his land. Rather than granting a variance to permit platting of these remnants, the community should require that they be used to increase the area of the other lots. Every time a substandard lot is allowed by variance under these circumstances, the legal position of the approval agency is weakened. In the event that a community is called upon to defend its standards in court, a history of granting such variances would tend to destroy its case.

Appendices

APPENDIX A - SUBDIVISION REGULATIONS LEGISLATION

Municipal

Legislation	Comments
462.358 PROCEDURE FOR PLAN EFFECTUATION; SUBDIVISION REGULATIONS. Subdivision 1. **Authority to regulate.** To provide for orderly, economic, and safe development of land and urban services and facilities, and to promote the public health, safety, morals and general welfare a municipality may adopt subdivision regulations which include minimum physical standards and design requirements as to such urban services and facilities, and procedures for plat approval, including a procedure for appeals from actions of the platting authority. Subdivision regulations shall be adopted by ordinance when the governing body is the platting authority and by resolution when the platting authority is an agency other than the governing body. A municipality may by resolution extend the application of its subdivision regulations to unincorporated territory located within two miles of its limits in any direction but not in a town which has adopted subdivision regulations; provided that where two or more noncontiguous municipalities have boundaries less than four miles apart, each is authorized to control the subdivision of land equidistant from its boundaries within this area.	Permission for the municipality to adopt subdivision regulations. Municipality may extend subdivision control intio unincorporated areas up to two miles from its corporate limits except in towns which have adopted subidivision regulations. This does not recognize the fact that counties to may adopt subdivision regulations.
Subd. 2. Terms of regulations. Subdivision regulations shall require that a proposed subdivision plat shall be in conformity with the official map of such exist. In establishing requirements for the location and width of streets, the municipality shall take into consideration anticipated traffic needs and the prospective character of the development and make any reasonable requirements therefor. As a condition to the approval of any subdivision plat of lands to which the regulations apply, subdivision regulations may prescribe requirements concerning the extent and manner in which street shall be graded and improved, and electric and gas distribution lines or piping, water, sewer, or other facilities shall be installed. The regulations may provide, or authorize the governing body or other platting authority to provide, that, in lieu of the completion of such work before the final approval of the plat, the governing body or platting authority may accept or require a contract secured by a cash deposit, certified check, or a bond in an amount and with surety and conditions satisfactory to it, to assure the municipality that such improvements and utilities will be actually constructed and installed according to the specifications approved by the governing body or platting authority as expressed in the contract; and the municipality may enforce such contracts by appropriate legal and equitable remedies. The subdivision regulations may require that in appropriate plots of subdivisions to be developed for residential, commercial, industrial or other uses, or as a planned development which includes residential, commercial and industrial uses, or any combination thereof, that a reasonable portion of each proposed subdivision be dedicated to the public for public use as parks, playgrounds, public open space, or storm water holding areas or ponds, or that the subdivider contribute an equivalent amount in cash based on the fair market value of the undeveloped land, as defined by the regulations, provided that cash payments received under such regulations shall be placed in a special fund by the municipality and used only for the acquisition of land for parks, playgrounds, public open space and storm water holding areas or ponds, development of existing park and playground sites, public open space and storm water holding areas or ponds, and debt retirement in connection with land previously acquired for such public purposes. The subdivision regulations, in setting forth the reasonable portion of each proposed subdivision to be dedicated to the public for public use as provided above, may take into consideration the open space, park, recreational or common areas and facilities which the subdivider has provided for the exclusive use of the residents of the subdivision. A municipality may, through subdivision regulations, prohibit or restrict development for purposes of soil and water conservation. Such soil and water conservation regulations may call for site development plans with provisions for the control of drainage, erosion, and siltation.	Provisions which may be included in the subdivision regulations. Permission for the municipality to require land developers to dedicate land for parks or cash in lieu of land.

Subd. 3. **Plat approval.** After a municipality adopts subdivision regulations, copies of the regulations shall be filed with the county register of deeds as provided in sections 462.351 to 462.364. Thereafter, no subdivision plat for land within the area to which the regulations are applicable shall be filed or accepted for filing unless it is accompanied by a certified copy of the resolution approving it. Before a subdivision plat is approved, it shall be reviewed by the platting authority as to its conformity to subdivision regulations. The platting authority may provide that proposed plats and subdivision developments be referred to the planning agency for review and recommendation. Unless otherwise provided by law or charter, prior to the approval of a plat by the platting authority, a public hearing shall be held thereon after notice of the time and place thereof has been published once in the official newspaper at least ten days before the day of the hearing. At the hearing all persons interested in the plat shall be heard and the platting authority may thereafter approve or disapprove the plat but failure of the platting authority to act on the application within 60 days is deemed approval. The grounds for any refusal to approve a plat shall be set forth in the proceedings of the platting authority and reported to the applicant. After approval a plat may be filed or recorded as otherwise provided by law.

After a subdivision ordinance is adopted copies of the regulations shall be filed with the county register of deeds and he cannot accept for filing any plat that is not approved according to the terms of the regulation.

Before a plat can be approved a public hearing must be held.

Subd. 4. **Restrictions on filing and recording conveyances.** In a municipality in which subdivision regulations are in force and have been filed or recorded as provided in this section, no conveyance of land to which the regulations are applicable shall be filed or recorded, if the land is described in the conveyance by metes and bounds or by reference to an unapproved registered land survey made after the effective date of Laws 1961, Chapter 626 or to an unapproved plat made after such regulations become effective. The foregoing provision does not apply to a conveyance if the land described:

Conveyance of land by reference to an unapproved plat or registered land survey and conveyance by metes and bounds (survey description) prohibited where subdivision regulations in force.

(1) was a separate parcel of record April 1, 1945 or the date of adoption of subdivision regulations under Laws 1945, Chapter 287, whichever is the later, or of the adoption of subdivision regulations pursuant to a home rule charter, or

(2) was the subject of a written agreement to convey entered into prior to such time,

(3) was a separate parcel of not less than two and one-half acres in area and 150 feet in width on the effective date of this Act or is a single parcel of land of not less than five acres and having a width of not less than 300 feet.

In any case in which compliance with the foregoing restrictions will create an unnecessary hardship and failure to comply does not interfere with the purpose of the subdivision regulations, the platting authority may waive such compliance by adoption of a resolution to that effect and the conveyance may then be filed or recorded. Any owner or agent of the owner of land who conveys a lot or parcel in violation of the provisions of this subdivision shall forfeit and pay to the municipality a penalty of not less than $100 for each lot or parcel so conveyed. A municipality may enjoin such conveyance or may recover such penalty by a civil action in any court of competent jurisdiction.

Subd. 5. **Permits.** Except as otherwise provided by this section all electric and gas distribution lines or piping, roadways, curbs, walks and other similar improvements shall be constructed only on a street, alley, or other public way or easement which is designated on an approved plat, or properly indicated on the official map of the municipality, or which has otherwise been approved by the governing body. When a municipality has adopted an official map, no permit for the erection of any building shall be issued unless the building is to be located upon a parcel of land abutting on a street or highway which has been designated upon an approved plat or on the official map or which has been otherwise approved by the governing body, and unless the buildings conform to the established building line. This limitation on issuing permits shall not apply to planned developments approved by the governing body pursuant to its zoning ordinance. No permit shall be issued for the construction of a building on any lot or parcel conveyed in violation of the provisions of this section.

If an official map has been adopted the municipality must not issue a building permit if the building does not front on a public street or if the building does not conform to the building set back lines.

Subd. 6. **Variances.** Subdivision regulations may provide for a procedure for varying the regulations as they apply to specific properties where an unusual hardship on the land exists, but variances may be granted only upon the specific grounds set forth in the regulations.

Subd. 7. **Vacation.** The governing body of a municipality may vacate any publicly owned utility easement or boulevard reserve or any portion thereof, which are not being used for sewer, drainage, electric, telegraph, telephone, gas and steam purposes or for boulevard reserve purposes, in the same manner as vacation proceedings are conducted for streets, alleys and other public ways under a home rule charter or other provisions of law.

A boulevard reserve means an easement established adjacent to a dedicated street for the purpose of establishing open space adjacent to the street and which area is designated on the recorded plat as "boulevard reserve".

Subd. 8. **Plat approval under other laws.** Nothing in this section is to be construed as a limitation on the authority of municipalities which have not adopted subdivision regulations to approve plats under any other provision of law.

394.25 **FORMS OF CONTROL.** Subdivision 1. Official controls shall be adopted by ordinance and may include but are not limited to the features set forth in this section.

Federal and state owned land exempt from official controls.

Official controls within the 7 county metropolitan area shall not be apply to use of land for public purposes.

Subd. 2. Zoning ordinances establishing districts within which the use of land or the use of water or the surface of water pursuant to Minnesota Statutes, 1973 Supplement, Section 378.32 for agriculture, forestry, recreation, residence, industry, trade, soil conservation, water supply conservation, surface water drainage and removal, conservation of shorelands, as defined in section 105.485, and additional uses of land and of the surface of water pursuant to Minnesota Statutes, 1973 Supplement, Section 378.32, may be by official controls encouraged, regulated, or prohibited and for such purpose the board may divide the county into districts of such number, shape, and area as may be deemed best suited to carry out the comprehensive plan. Official controls may also be applied to wetlands preservation, open space, parks, sewage, disposal, protection of ground water, protection of flood plains as defined in section 104.02, protection of wild, scenic or recreational rivers as defined in section 104.33, protection of slope, soils, unconsolidated materials or bedrock from potentially damaging development, preservation of forests, woodlands and essential wildlife habitat, reclamation of non-metallic mining lands, and the preservation of agricultural lands.

Zoning ordinances can regulate use of land, water and surface of water.

Official controls may be used for wetlands preservation, open space, parks and other specified uses.

Subd. 3. Within each such district zoning ordinanaces or maps may also be adopted designating or limiting the location, height, bulk, number of stories, size of, and the specific uses for which dwellings, buildings, and structures may be erected or altered, the minimum and maximum size of yards, courts, or other open spaces, setback from existing roads and highways and road and highways designated on an official map; protective measures necessary to protect the public interest including but not limited to controls relating to appearance, signs, lighting, hours of operation and other esthetic performance characteristics including but not limited to noise, heat, glare, vibrations and smoke; the area required to provide for off street loading and parking facilities; heights of trees and structures near airports; and to avoid too great concentration or scattering of the population. All such provisions shall be uniform for each class of land or building throughout each district, but the provisions in one district may differ from those in other districts.

Specifying those things which can be regulated by a zoning ordinance.

Subd. 4. Official maps as defined in section 394.22, Subdivision 12.

Subd. 5. Repealed by Laws 1974 Chapter 571.

Subd. 6. Repealed by Laws 1974 Chapter 571.

Subd. 7. Specific controls pertaining to other subjects incorporated in the comprehensive plan or establishing standards and procedures to be employed in land development including, but not limited to, subdividing of land and the approval of land plats and the preservation and dedication of streets and land for other public purposes and the general design of physical improvement.

Permitting the regulation of land development.

Subd. 8. Any statute of Minnesota, any administrative rule or regulation of any department of the state of Minnesota affecting the county, or any code, adopted by reference as part of the official control. The term "code" as used herein means any compilation of regulations or standards or part thereof prepared by any governmental agency or any trade or professional association for general distribution in printed form as a standard or model on the subject of building construction, plumbing, electric wiring, inflammable liquids, sanitary provisions, public health, safety, or welfare. Prior to adoption at least one copy of the statute, rule, regulation, ordinance or code shall be marked as official copies and filed for use and examination by the public in the office of the county auditor. Provisions of the statute, rule, regulation, ordinance or code thus incorporated in such ordinance by reference shall be as much a part of the ordinance as if they had been set out in full therein.

Permitting adoption of statute, rule or regulation by reference.

Statute, rule, regulation, ordinance or code to be adopted by reference must be available for public examination.

Subd. 9. Erosion and sediment controls with regard to clearing, grading, excavation, transporting and filling of lands. Erosion and sediment controls may include, but need not be limited to requiring the development of plans before any land is disturbed. Plans for disturbing land may be submitted to the appropriate soil and water conservation district for comment and review.

Permitting control of clearing, grading, excavation, transporting and filling of lands for purpose of controlling erosion and sediment.

Subd. 10. An amendment to official controls may be initiated by the board, the plannning commission, or by petition of affected property owners as defined in the official controls. An amendment not initiated by the planning commission shall be referred to the planning commission, if there is one, for study and report and may not be acted upon by the board until it has received the recommendation of the planning commission.

Amendment to "official controls" can not be acted on by county board until it has been reviewed by the planning commission.

APPENDIX B - DEFINITIONS

ALLEY - A public vehicular way which affords a secondary means of vehicular access to abutting property and which is not intended for general traffic circulation.

BLOCK - An area of land within a subdivision which is entirely bounded by streets or by streets, railroad right-of-way, waterway or exterior boundary of the subdivision.

BUILDING - A structure having a roof supported by columns or walls and intended for the shelter, housing, or enclosure of persons, animals or chattel.

BUILDING SETBACK LINE - A line parallel to a street between which line and the nearest street right-of-way line no building may be erected or placed.

CITY COUNCIL OR COUNTY BOARD - The governing body of the city or county.

COMMISSION OR PLANNING COMMISSION - The officially created planning commission of the city or county which has been established by ordinance.

COMPREHENSIVE PLAN - The comprehensive development plan prepared and adopted by the city or county indicating the general locations recommended for major land uses, streets, parks, public buildings, and other public improvements.

CROSSWALK OR PEDESTRIAN WAY - A municipally owned right-of-way which crosses a block and furnishes pedestrian access to adjacent streets or properties.

EASEMENT - A grant by a property owner to the use of a strip of land by the public, a corporation or persons for which specific purposes as the construction of utilities, drainage ways and roadways.

ENGINEER - The City or County Engineer or a duly authorized consultant engineer.

GRADE, PERCENTAGE OF - The rise or fall of a street in feet and tenths of a foot for each one hundred (100) feet of horizontal distance measured at the center line of the street.

LOT - The smallest unit of a subdivision individually numbered or designated on the plat for purposes of description, recording, conveyance, development and taxation.

LOT DEPTH - The mean horizontal distance between the street right-of-way line and the opposite rear line of the lot measured in the general direction of the side lot lines.

LOT, DOUBLE FRONTAGE - A lot having frontage on two parallel or approximately parallel streets.

LOT WIDTH - The mean horizontal distance between the side property lines of a lot.

PLAT - A map or drawing indicating the subdivisions or re-subdivision of land, intended to be filed for record.

RIGHT-OF-WAY - Land dedicated and publicly owned for use as a street , alley, or crosswalk.

STREET, MAJOR OR ARTERIAL - A street of considerable continuity, which is used primarily for heavy through traffic between major traffic generation areas.

SREET, COLLECTOR - A feeder street which provides connection primarily between arterial streets or arterial streets and minor streets. Collector sreets include the principal entrance streets of a residential development and the prinicipal streets for circulation within such development.

STREET, CUL-DE-SAC - A comparatively short minor street having one end open to traffic and the other end permanently terminated by a vehicular turn-around.

STREET, MARGINAL ACCESS - A minor street which is parellel and adjacent to a highway or an arterial street; and which provides access to abutting properties and protection from through traffic.

STREET, MINOR OR LOCAL - A street which serves primarily as access to abbutting properties, and is not intended to carry through traffic.

STREET WIDTH - The street right-of-way width, measured at right angles to the center line of the street.

SUBDIVIDER - A person who submits a plat for the purpose of land subdivision as defined herein. The subdivider may be the owner or authorized agent of the owner of the land to be subdivided.

SUBDIVISION - The division of a lot, tract or parcel of land into two (2) or more lots, tracts or parcels for the purpose of transferring ownership or building development, or, if a new street is involved, any division or development of a parcel of land. The term shall include resubdivision of land; provided, however, that the sale or exchange a small parcels of platted land to or between adjoining property owners shall not be considered as a subdivision.

APPENDIX C - SUGGESTED TECHNICAL CHECK LIST FOR PLANNING COMMISSION'S USE IN SUBDIVISION REVIEW

Check Here When Each Item is Satisfactory

PRE–APPLICATION MEETING

_____ Location Map

_____ Sketch Plan of Street and Lot Layout (on a Topographic Map if possible)

_____ Conformity with Comprehensive Plan

_____ Conformity with official Map

_____ Conformity with Zoning

PRELIMINARY PLAT REVIEW

_____ Location Map (if not included above)

_____ Site Map (including land within 300 feet of boundary)

_____ Existing and Proposed Streets

_____ Existing and Proposed Utilities

_____ Names of Adjacant Property Owners

_____ Topography (2' contour intervals)

_____ Location of Significant Natural Features

_____ Areas subject to Flooding and Wetlands

_____ Any easements or Buildings on the Tract to be Platted

_____ Location of Existing and Proposed Parks, School Sites, and Other Public Areas

_____ Existing and Proposed Zoning Changes (if any)

_____ Preliminary Plat Map (at a scale no smaller than 100 feet to the inch)

_____ Name of Subdivision (no duplication)

_____ Location of Section, Township, Etc.

_____ Names and Addresses of Owner and Subdivider

_____ Names of Engineer or Surveyor

_____ Names of Adjoining Subdivisions

_____ Date Plat Prepared

_____ North Arrow

_____ Scale

_____ Block and Lot Numbers

_____ Names, Locations, and Widths of Adjacent Streets (existing)

_____ Names, Location, and Widths of Streets Proposed by the Subdivision (no duplication of existing streets unless the proposed street is an extension of an existing street)

_____ Location and Width of Alleys, Crosswalks or Pedestrian ways, and Easements

_____ Lot Layout with dimensions and building Setback Lines

_____ Parcels of Land to be Dedicated or Reserved for Public Access

_____ Utilities (water lines, storm drains, sanitary sewers, fire hydrants, etc.)

_____ Sidewalks

_____ Street Trees

_____ Street Lighting and Signs

_____ Proposed Restrictive Covenants

In addition to the above check list, it is normally the responsibility of the community's engineer to make certain that the boundary line survey of the proposed subdivision closes with an error not to exceed one foot in 7,500 feet. The engineer must also check street and utility profiles and data to insure that they meet community standards for grades, service capacity limitations, materials, etc.

The Final Plat must be prepared in accordance with the provisions of Chapter 505 of the Minnesota Statutes. It is usually the responsibility of the Engineer and planning staff to determine whether or not the final plat is an substantial agreement with the preliminary plat, the provisions of Chapter 505, and the requirements of all other appropriate community regulations and ordinances.

SOLID WASTE (M.S. 116.07 et. seq.) - PCA establishes performance standards by regulation, county, municipal and private disposal facilities (land fills, etc.) must be approved by PCA.

LIQUID WASTE (M.S. 116.07 et. seq.) - PCA establishes performance standards for liquid waste treatment facilities, municipal and county system plans must be approved by PCA, PCA licenses operators.

INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (DOH Regulations) - DOH established recommended guidelines. Regulatory power transferred to PCA via interdepartmental agreement. PCA is in process of drafting regulations, governing minimum lot size and system specifications. Currently, PCA performance standards are the only general restrictions on individual disposal systems. See Shoreland, Wild, Scenic and Recreational Rivers and Floodplains.

AIR QUALITY (M.S. 116.07 et. seq.) - PCA has set performance standards by regulation. Plans for proposed air emission facilities must be approved by the PCA.

WATER SUPPLIES (M.S. 105.41) - DNR issues permits for appropriations of water to serve as domestic water supply for over 25 persons. DOH licenses operators of domestic water supply systems. DNR issues permits to drill a well.

INDIVIDUAL WATER SUPPLIES (DOH Regulations) - DOH has established recommended guidelines.

PLUMBING IN GENERAL (DOH Regulations) - Any structure capable of human habitation needs a plumibng permit from DOH. Enforced for cluster developments of 10 or more units but not in cities of the first class.

NOISE (M.S. 116.07 et. seq.) - PCA establishes performance standards. Enforced by complaint.

SHORELANDS (M.S. 105.485) - DNR sets minimum standards relating to sewage systems design and location, structure setback, height of structure above high water line, lot size, alterations to vegetation and shoreland contour. Counties and municipalities must zone shorelands to meet the minimum standards, if not, DNR can adopt an ordinance for the governmental unit. Local governmental unit enforces.

WILD SCENIC AND RECREATIONAL RIVERS (M.S. 104.32) - DNR sets minimum standards in its management plan governing placement of structures, minimum lot size, sewage system design and location, cutting of vegetation and alterations to the watercourse. Counties and municipalities are required to zone to meet the minimum standards, if not, DNR can adopt an ordinance for the governmental unit. Local governmental unit enforces.

FLOOD PLAINS (M.S. 104.01) - DNR sets minimum standards for flood plain management plans. Local governmental units must adopt ordinances to meet the minimum requirements including identification and labeling of the floodplain, and restriction of flood plain uses.

ALTERATIONS TO PUBLIC WATERS (M.S. 105.38) - Any change or diminishment to the course current or cross section of a public water (any water which serves a beneficial public purpose) requires a permit from DNR.

CRITICAL AREAS (M.S. 116G.01-14) - Governor designates an area as a "critical area" based on EQC recommendation. Local governmental units are required to prepare land use plans for the area which are satisfactory to the EQC. If the local governmental units fail to prepare a satisfactory plan within one year, the EQC can prepare and adopt one for them. Local governments enforce the plan, the EQC can compel enforcement.

ENVIRONMENTAL IMPACT ASSESSMENT AND STATEMENT (M.S. 116D.04) - EQC requires preparation of an EIA prior to construction of a new or additional residential development outside any standard Metropolitan Statistical Area that includes 100 or more units in an unsewered area or 500 or more units in a sewered area or, if the development is within a Standard Metropolitan Statistical Area, an EIA is required if the development includes 200 or more units in an unsewered area of 1000 or more units in a sewered area. EIAs can also be required for certain shoreland or flood plain developments, land clearance, impoundments of water, or construction of harbor or marine facilities. After review of the EIA, the EQC may require preparation of an EIS.

AIRPORTS (M.S. 360.063) - The Commissioner of Aeronautics has the power in certain cases to zone the land within 5 miles of an airport.

HIGHWAYS (Dept. of Highways Regulations) - Commissioner of Highways sets minimum standards which must be achieved in order for a road to be eligible for state-county or state-municipal aid.

UTILITY CROSSINGS (Dept. of Highways Regulations) - Crossing a highway requires a permit from the Commissioner of Highways. Crossing public land or water requires a permit from the DNR.

HIGHWAY ADVERTISEMENT (Dept. of Highway Regulations) - Requires a permit from the Highway Department district headquarters. Commissioner of Highways has established standards governing size and setback.

REGISTRATION OF PLATS (M.S. 83.20 et seq.) Requires that all subdivisions outside of urban areas be registered with the commissioner of securities. Registration is conditioned upon compliance with state environmental quality standards which are established by the Environmental Quality Council.

MAJOR REFERENCES

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State of New Jersey, Department of Community Affairs. Administrative Guide to Subdivision Regulations.

State of New York, Office of Planning Coordination. Control of Land Subdivision. Albany, N.Y.: Office of Planning Coordination, 1968.

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Additional minor articles and various subdivision regulations used in Minnesota were also consulted.